Evaluation Study on the Effectiveness of the Counselling and Treatment Centres for Problem and Pathological Gamblers

Final Report

Department of Applied Social Sciences
The Hong Kong Polytechnic University

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The research team is deeply impressed by the service users who had taken part in this study. We understand that our data collection process might bring about unpleasant feelings to the service recipients and their families when they had to recall their miserable histories with regard to the fight against gambling. However, we are sure that their input would benefit a lot to achieve better understanding on the problem of gambling, and how the consequences of gambling could be alleviated. We wish to thank the service users and their families for the tolerance and unreserved openness they had afforded us.

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Executive Summary

In September 2004, the Home Affairs Bureau (HAB) commissioned the Department of Applied Social Sciences, the Hong Kong Polytechnic University to undertake an evaluation study on the effectiveness of the two Counselling and Treatment Centres for Problem and Pathological Gamblers -- *Caritas Addicted Gamblers Counselling Centre (Caritas Family Service) and Even Centre (Tung Wah Group of Hospitals).*

Objectives of the evaluation study

a. To launch a comprehensive review of the adequacy and effectiveness of the services of the two Centres;

b. To examine the validity and usefulness of the screening tools adopted by the two Centres in assessing gambling-related problems;

c. To identify factors related to the success or failure of the services; and

d. To advise the Government on long-term gambling treatment services.

Major methodologies employed in this study

a. For validation of screening tools, during the period from October 2003 to April 2005, clients of the Caritas Addicted Gamblers Counselling Centre filled a self-administered Chinese SOGS while clients of the Even Centre underwent a standardized screening conducted by the counsellors, using the Chinese DSM-IV questionnaire.

b. For service output study, the two Centres provided administration records and quarterly statistics from 1.10.2003 to 31.12.2005 for data compilation and analysis.

c. For service outcome study, the changes of the Level II problem and pathological gamblers and their significant others after receiving treatment services were evaluated by means of a questionnaire survey, a semi-structured interview, a taped observation of the therapeutic sessions and a review of case and group work records. From 1.2.2005 onward, the first three intake sessions of Level II problem and pathological gamblers and their significant others were videotaped for analysis with their consent. The counsellors of the two Centres were also asked to report to the research team on services rendered to clients in terms of scope, content and methods adopted in their service provision. Such information was collected and analyzed by means of structured interviews and questionnaires.

Key Findings

(a) Validation of Screening Tools

- DSM-IV is a relatively reliable and valid tool adopted for screening pathological gamblers in the following areas:

(i) screening and assessing the severity of the gambling problems of service-seekers

(ii) identifying pathological gamblers among service-seekers.

- However, psychometric validation must be conducted in order to verify the performance and applicability of these "borrowed" western tools, whether they are DSM or non-DSM criteria-based, in the Chinese treatment samples.

(b) Service Output (1.10.2003 – 31.12.2005)

- Hotline service and telephone enquiry have been most welcomed and used by potential clients and the general public. Each centre received more than 5,000 telephone enquiries in the period.

- The total number of Level II cases (cases screened as problem and/or pathological gamblers) handled by the Caritas Addicted Gamblers Counselling Centre and the Even Centre were 1,092 and 1,116 respectively.

- The total number of Level III cases (clients who received psychiatric and/or residential treatment services referred by the two Centres) handled by the Caritas Addicted

Gamblers Counselling Centre and the Even Centre were 79 and 52 respectively.

- Casework services rendered to p/p gamblers by the Caritas Addicted Gamblers Counselling Centre included telephone/hotline counselling, individual counselling sessions for gamblers, family counselling sessions for gamblers and their significant others, email counselling for gamblers and their significant others, home or workplace visits, and escort services.

- Casework services rendered to p/p gamblers by the Even Centre included telephone/hotline counselling, individual counselling sessions for gamblers, family counselling sessions for gamblers and their significant others, financial counselling, case conferences, home visits, escort service and collateral contacts.

- Group work services/treatment groups rendered to p/p gamblers and their significant others by the Caritas Addicted Gamblers Counselling Centre included short-term group sessions on therapeutic intervention and long-term (mutual-help) groups.

- Group work services/treatment groups rendered to p/p gamblers and their significant others by the Even Centre included short-term group sessions on therapeutic intervention, psycho-educational group, peer group counselling, long-term (mutual-help) groups and training camps.

- The two Centres organized staff training and development programmes, staff supervision sessions, educational programmes for the general public and training programmes for professionals.

- 64.9% of the Level II cases from the Caritas Addicted Gamblers Counselling Centre and 69.1% of similar cases from the Even Centre were closed as their goals were attained.

- 98.2% of the gamblers and 96.0% of their family members were satisfied with the service provided by the Caritas Addicted Gamblers Counselling Centre.

- 95.8% of the clients were satisfied with the services provided by the Even Centre.

(c) Service Outcomes

- The two Centres have been operating in the right direction, and are able to meet the requirements of the Service Agreement.

- Over 90% of the service-users (gamblers and their family members) were satisfied with the quality and quantity of services received.

- Almost 70% of the closed cases were successful cases, in terms of meeting the treatment objectives.

The two Centres have been able to:

- provide appropriate and effective counselling and treatment services for gamblers and their family members;

- facilitate the development of the best practices and expertise in counselling and treatment services for gamblers;

- build up the requisite network for gambling treatment in Hong Kong;

- collect the required data and statistics necessary for a better understanding of the problem of gambling; and

- reach out to the general public and educate them to avoid becoming problem/pathological gamblers.

Most significant effectiveness of the service:

i. clients had acquired the ability to control their desire to gamble;

ii. clients had developed responsibility for their own gambling behaviour and its consequences; and

iii. clients had improved their social skills and family relationships.

After receiving services for 6 months, clients' perceived effectiveness of the services provided by the two Centres in order of priority are as follows:

i. a better understanding of one's own gambling behaviour and its consequences;

ii. better ability to control one's desire for gambling;

iii. ability to solve financial problems; and

iv. ability to solve family problems.

(d) Profile of Level II P/P Gamblers

- middle-aged males in their 30s and 50s;
- having primary or junior secondary school education;
- over 60% working in the service sector;
- over 80% having financial problems and debts;
- over 60% having emotional problems; and
- about 50% suffering from poor family and marital relationships.

Limitations of the Study

- As this is the first study on the effectiveness of counselling services for gamblers in Hong Kong, no local reference data are available for comparison purpose.
- As the cut-off date[1] for data collection was 31.12.2005, the performance of the two Centres from 1.1.2006 to 30.9.2006 is not included in the evaluation.
- Some users refused to participate in the study.
- There are no longitudinal data for assessing the inter-relationship of the longer-term or more in-depth changes as a result of the counselling service; the effectiveness of the service and the sustainability of such service over time.

[1] Due to the large volume of data involved in this research study, the resultant data collection process has in some ways intruded the work of the staff members of the two Centres. On the other hand, the Hong Kong Polytechnic University research team has agreed to hand in the final report to the Home Affairs Bureau three months earlier than the original schedule. Under such circumstances, HAB had consented to set the cut-off date for data collection at 31 December 2005. Hence the evaluation on performance of the two Centres counted up to that date.

Summary Remarks

i. Literature research revealed that some gamblers either dropped or reduced gambling without receiving the counselling/treatment services.

ii. Causes of pathological gambling are complicated and are embedded in the culture, subculture, social systems and one's psychological and social conditions. There is no single cure or the best model for treatment.

iii. Total abstinence from gambling is not possible. Positive treatment outcomes should be viewed as helping gamblers understand their personal responsibility so that they can develop self-control when engaging in gambling activities.

iv. On treatment methods, cognitive-behavioural therapies which focus on altering cognitions and changing gambling behaviour are effective in casework services for pathological gamblers, and supplemented by treatment groups for gamblers and family members. The "case-in-group" approach is effective in treating local p/p gamblers and their families in Hong Kong.

v. Government has the responsibility, through law enactment and enforcement, to supervise the operations of gambling activities and keep them under control.

vi. Prevention is better than cure. There is a need to develop a long-term strategy in gambling prevention among young people.

vii. In developing a service delivery model, its feasibility, cost-effectiveness, sustainability and financial support must be carefully considered.

viii. The need for service expansion is obvious. Nevertheless, the research team cautions against an unlimited expansion of services in view of competing community needs. A careful, gradual and affordable expansion of treatment programmes for p/p gamblers is recommended.

Recommendations

- The two gambling treatment Centres at the current service level should be supported for another two years up to 30 September, 2008.

- With the existing level of resource provision, the operating hours of the current hotline service could be considered to be extended to 24 hours on a pilot basis.

- The future development of and resource input to the two treatment Centres could be reviewed after commissioning another in-depth research to evaluate their cost-effectiveness and need for continuous service.

- A community-based approach focusing on helping gamblers, potential gamblers and their families build up their ability to protect themselves from gambling should be considered as an alternative treatment model.

- Two small treatment centres with a smaller group of counsellors / social workers could be established on a pilot basis to provide treatment services to p/p gamblers and their families in Kowloon and other areas.

- These two new treatment centres may consider using alternative treatment models and a community-based approach, to serve the needs of :

  (i) elderly gamblers (e.g. those involved frequently in group gambling in public housing estates);
  (ii) gamblers who belong to ethnic minorities;
  (iii) youth, especially secondary school students; and
  (iv) women, especially housewives aged between 30-60.

- The Ping Wo Fund may consider as appropriate applications from non-governmental organizations, schools and other community organizations to launch prevention and/or treatment programmes for p/p gamblers on a smaller scale.

- Service output and outcome indicators should be standardized for all gambling treatment centres.

評估研究

問題及病態賭徒輔導治療中心的服務成效

報告摘要

香港特區政府民政事務局，於2004年9月，委託香港理工大學應用社會科學系展開研究，評估兩間爲問題及病態賭徒而設的輔導治療中心之成效。這兩間中心分別爲隸屬於香港明愛家庭服務部的「明愛展晴中心」和隸屬於東華三院的「平和坊」。

研究目的

（一） 全面檢討及審核兩間中心所提供之服務是否足夠及具備成效。

（二） 檢討兩間中心用來評估服務對象賭博行爲及其引申的問題所採用識別工具之效用及實用性。

（三） 分析兩中心所提供服務的成功或失敗因素。

（四） 向政府提出有關治療及預防問題賭博長遠服務規劃之意見。

採用的主要評核方法

（一） 在驗證識別工具之有效性方面，於 2003 年 10 月至 2005 年 4 月期間，明愛展晴中心服務使用者填報一份「南奧克斯甄別賭博問卷」（SOGS）之中文版本；而平和坊服務使用者則填報中文版之「精神失調診斷及統計手冊第四版」問卷（DSM-IV），此兩份問卷成爲兩個中心評核及識別服務使用者是否成爲其服務對象（即所謂 Level II 個案）的主要工具。

（二） 在量度服務數量方面，兩間中心提供了由 2003 年 10 月 1 日至 2005 年 12 月 31 日期間的行政記錄與每三月一次之統計數字，作爲數據匯編及分析依據。

（三） 在評估服務效果方面，主要通過問卷調查、半結構式的訪問、治療進行時之錄影觀察及個案與審閱小組記錄，來評核「二級問題」（Level II）問題/病態賭徒及其家人在接受治療服務後之轉變。從 2005 年 2 月 1 日開始，在接受服務者同意下，「二級問題」問題/病態賭徒及其家人的首三次治療環節，均被錄影作爲研究小組分析用。兩間中心之輔導員亦會透過結構式的面談及問卷填報，向研究小組提供他們的服務範圍、內容、及所採用之輔導方法作研究分析用。

重要調查結果

（一） 識別工具之驗證

DSM－IV 在以下兩方面比較可靠及有效地識別問題/病態賭徒成爲服務對象，因爲它能夠做到：

一、 鑑定服務使用者在賭博問題上之嚴重程度；及

二、 真正識別需要接受輔導/治療之問題/病態賭徒。

然而，在本地使用源於西方的識別方法，此等識別工具之適切性及確用性，都需通過進一步心理測量的效度驗證，方能更爲準確；此點亦突出了需要設計合適華人社會識別問題/病態賭徒有效工具之迫切性。

（二） 服務數量（1.10.2003-31.12.2005）

- 熱線電話服務及電話諮詢服務，最爲有意尋求協助人士及大眾市民所歡迎及使用。在這段期間，每間中心平均接聽了超過五千個電話查詢。
- 在二級個案（被辨定爲問題/病態賭徒）中，「明愛展晴中心」處理了 1,092 宗，「東華三院平和坊」處理了 1,116 宗。
- 在三級個案（轉介個案接受精神治療及/或住院治療）中，「展晴中心」處理了 79 宗，「平和坊」處理了 52 宗。
- 在問題及病態賭徒的個案輔導服務方面，「展晴中心」提供之服務包括電話或熱線輔導；爲賭徒而設的個人輔導課程；爲其家人或親屬而設的輔導

課程；亦爲服務使用者提供電郵輔導；家庭探訪；就業輔導及護送服務。

- 「平和坊」在這方面的服務包括電話輔導，爲賭徒而設的個人輔導課程，爲其家人或親屬而設的輔導課程；財務問題上的輔導；個案研討會；家庭探訪；護送服務；以及與有關親屬保持密切聯繫等。
- 小組輔導/治療小組內容方面，「明愛展晴中心」爲問題及病態賭徒及他們家人提供的輔導服務包括治療小組；短期課程；及長期互助小組。
- 「平和坊」在這方面的輔導服務包括治療小組；短期課程；心理教育小組；朋輩輔導小組；長期互助小組及訓練營。
- 兩間中心分別爲其職員舉辦在職培訓及發展計劃，以及員工監督的環節。此外，中心亦有爲市民大眾舉辦各項教育性活動，以及爲專業人士提供賭博輔導訓練。
- 「明愛展晴中心」所處理的二級個案中，達致所訂立目標而結案的比率爲64.9%，「平和坊」則爲 69.1%。
- 98.2%接受「明愛展晴中心」輔導的個案及他們 96%的家人，對中心所提供的服務表示滿意。
- 95.8%接受「平和坊」服務的個案及其家人，對「平和坊」所提供的服務表示滿意。

（三） 服務成效

- 資料顯示「明愛展晴中心」及「東華三院平和坊」俱朝著正確的方向運作，同時亦符合民政事務局與彼等簽約時對服務質量的整體要求。
- 超過 90%接受服務人士，無論是服務對象本身或他們的家人，對兩間中心所提供服務之質與量均表示滿意。
- 在完結的個案當中，接近 70%是達到治療目標。
- 兩間中心均能夠做到：
  - → 爲賭徒和他們的家人提供適當及有效的輔導和治療；
  - → 協助發展本土化和專業的方法來輔導問題/病態賭博行爲；

- → 在香港建立一個處理問題賭博的網絡；
- → 收集的有關數據，協助進一步了解香港的賭博問題；
- → 面向大眾，教育和提醒他們免於淪爲問題或病態賭徒。

➢ 服務最顯著效益在於：

- → 接受服務者能夠控制他們對賭博的慾求；
- → 接受服務者醒覺到要爲他們的賭博行爲及所帶來的後果負責；以及
- → 接受服務者改善了他/她們的生活技巧和與家人關係得到改善。

➢ 在接受服務六個月後，求助者感覺到有效益地方，以優先次序列出爲：

- → 對自己的賭博行爲和它所帶來的後果，有更深入的認知；
- → 對自己賭博的慾求，有較佳的控制力；
- → 解決財務上的問題；以及
- → 解決家庭關係的問題。

（四） 「二級問題賭徒」（主要服務對象）的描繪如下：

- ➢ 30 至 50 歲的中年男士爲多，
- ➢ 中、小學教育程度，
- ➢ 超過 60%在服務性行業工作，
- ➢ 超過 80%財務上有困難及欠債，
- ➢ 超過 60%顯示個人情緒問題，及
- ➢ 大約 50%家庭及婚姻關係呈現不和諧。

研究局限

（一） 這是香港同類型研究的首次，所以缺乏有關的本土數據作參考比較。

（二） 所收集的資料截算日期爲 2005 年 12 月 31 日，因此兩間中心由 2006 年 1 月 1 日至 9 月 30 日的表現未在此研究內評核。

（三） 不是所有接受服務者都願意參與此項調查研究。

（四） 缺乏追蹤性的數據來進一步評估服務使用者在接受輔導後所產生較長期，更深層的正面變化，與成效和持久性的關係。

扼要論點

（一） 文獻顯示部份賭徒不需要協助而自動放棄或減少賭博。

（二） 淪爲問題/病態賭徒之原因錯綜複雜；與文化背景、次文化群處境；社會制度；以及個人心理及社交狀況的影響互爲表裡，交互影響。迄今，處理問題/病態賭博於東、西方均沒有靈丹妙藥稱爲最有效的治療模式。

（三） 完全戒絕賭博是不可能的事。正面的治療目標，應該是幫助賭徒清楚認識自己的責任，從而令他們即使仍然賭博，也能夠有充分的自我控制能力。

（四） 爲問題/病態賭徒而設的個案服務中，著重幫助接受服務者增加個人認知能力、和改變他們賭博習慣的「認知－行爲」改變療程；配合爲賭徒和他們的家人而設的治療小組，是較有效的治療模式。在香港，這種「小組結合個案」的處理手法，應是更有效幫助問題及病態賭徒和他們的家人。

（五） 透過制定和執行有關法律，去監管賭博事業的運作，保持它在控制範圍之內，政府責無旁貸。

（六） 預防勝於治療。我們需要一套長遠的策略，把「不要賭博」的意識在青少年間發展起來。

（七） 在訂定服務供應模式時，必須小心考慮該等服務的可行性、成本效益、持久性和財政支援。

（八） 無可置疑，爲問題及病態賭徒所提供的服務有擴大的需要，這需求得到研究支持。但無限量的擴充服務亦不可取，因爲社會上還有其他需要；我們建議應該在小心籌謀及資源許可的情況下，擴展此方面之治療服務。

研究小組建議

（一） 繼續支持兩間中心以目前所提供之服務水平，運作至 2008 年 9 月。

（二） 在現有的資源下，目前的電話熱線服務可以考慮以試點形式延長至 24 小時運作。

（三） 展開另一個研究，深入評價這兩間中心的成本效益，以及是否需要繼續服務，同時可以就中心的未來發展及資源的投放作一併回顧及前瞻。

（四） 一個以社區爲本的途徑，致力於幫助締建賭徒、準賭徒和他們家人抗拒賭博的能力的模式，應被視爲另類的治療模式。

（五） 建立兩個小型治療中心，透過輔導員/社會工作者，爲九龍及其他區域的問題及病態賭徒和他們的家庭提供服務； 這兩間小型中心可以考慮運用另類的治療模式，諸如一個以社區爲本的服務方法，提供服務予：

(i) 在屋邨或公共地方聚賭的長者；

(ii) 少數族裔的問題/病態賭徒；

(iii) 青少年（中學生）- 集中在預防賭博及個案處理；

(iv) 年齡介乎 30 至 60 歲的女性問題/病態賭徒。

（六） 「平和基金」可以考慮撥款，鼓勵非政府機構、學校及其他社區組織舉辦較小規模的解決問題/病態賭博的防範和/或治療項目。

（七） 訂立劃一的指標，用來量度所有賭博治療中心之服務數量及服務效益。

香港理工大學應用社會科學系
「問題及病態賭徒輔導治療中心
的服務成效」評估研究小組
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二〇〇六年六月

Evaluation Study on the Effectiveness of the Counselling and Treatment Centres for Problem and Pathological Gamblers

Final Report

1. Preamble: Gambling Concepts and Terminology

1.1 Historically, the word "gambling" referred to playing unfairly or cheating at play. A gambler was defined as a fraudulent gamester, sharper, or rook who habitually plays for money, especially extravagantly high stakes (*Oxford English Dictionary*, second edition, 1989). In modern times, gambling has come to mean wagering money or other belongings on chance activities or events with random or uncertain outcomes (Devereux, 1979). Gambling in this sense implies an act whereby the participant pursues a monetary gain without using his or her skills (Brenner and Brenner, 1990). This is the Oxford dictionary definition for gambling as well (*Oxford English Dictionary*, second edition, 1989). Throughout history, however, gambling also involves activities requiring skill. For example, a bettor's knowledge of playing strategies can improve his or her chances of winning in certain card games; knowledge of horses and jockeys may improve predictions of probable outcomes in a horse race (Bruce and Johnson, 1996). The use of such skills may reduce the randomness of the outcome but, because of other factors that cannot be predicted or analyzed, the outcome remains uncertain.

In this study, the term "gambling" used refers both to "games of chance that are truly random and involve little or no skill that can improve the odds of winning", and to "activities that require the use of skills that can improve the chance of winning". By its very nature, gambling involves a voluntary, deliberate assumption of risk, often with a negative expectable value. For example, in casino gambling, the odds are against the gamblers because the house takes its cut; thus, the more people gamble, the more likely they are to lose.

1.2 Throughout history, scholars and writers have theorized about why human beings gamble. These explanations have encompassed evolutionary, cultural, religious, financial, recreational, psychological, and sociological perspectives (Wildman, 1998). A current and widely disseminated theory is that people engage in gambling because it has the capacity to create excitement (Boyd, 1976; Steiner, 1970). People seek stimulation and try to optimize their subjective experience

by shifting their sensations. Indeed, it is common for individuals to take risks in life. Risk-taking underlies many human traits that have high significance for evolutionary survival, such as wanting and seeking food (Neese and Berridge, 1997). Moreover, risk-taking is reinforced by the emotional experiences that follow, such as relief from boredom, feelings of accomplishment, and the "rush" associated with seeking excitement. Individuals vary considerably in the extent to which they would take risks. Some would limit their risk-taking to only driving a few miles over the posted speed limit, whereas others may actively pursue mountain climbing, skydiving, or other exciting sports with a high risk of harm. However, gambling is neither a financially nor a psychologically risk-free experience. In addition to the possibility that gamblers will lose their money, they also risk experiencing a variety of adverse biological, psychological, and social consequences from gambling (American Psychiatric Association, 1994).

1.3 Understanding of the adverse consequences of excessive gambling has undergone profound change. In most of the histories, individuals who experienced adverse consequences from gambling were viewed as gamblers with problems; today, we consider them to have psychological problems. This change is analogous to the change in the understanding of alcoholics and alcoholism, and it has been reflected in, or stimulated by, the evolving clinical classification and description of pathological gambling in the various editions, between 1980 and 1994, of the *Diagnostic and Statistical Manual of Mental Disorders* (called DSM) published by the American Psychiatric Association. Changes over time in the DSM reflect a desire to be more scientific in determining appropriate criteria for pathological gambling by accounting for its similarities to other addictions, especially that of substance dependence (American Psychiatric Association, 1980, 1987, 1994; Lesieur, 1988; Rosenthal, 1989; Lesieur and Rosenthal, 1991).

The official medical recognition of excessive gambling is marked by the inclusion of excessive gambling in the DSM (American Psychiatric Association, 1980, 1987, 1994). It is not surprising, however, that some scholars (e.g., Szasz, 1970, 1987, 1991) have objected to medicalizing certain socially or culturally offensive behaviour in general, and gambling intemperance in particular (Rosecrance, 1985). **Today, despite significant gaps in research and a generally deficient state of scholarly literature, pathological gambling is commonly known to be a robust phenomenon (Shaffer et al., 1997) that also is complex in its origins accompanying disorders, and in its negative social and economic effects. Moreover, all these factors can be affected by traditional, contemporary, and constantly emerging**

gambling-related technologies.

1.4 Conceptualizing gambling behaviour on a simple continuum ranging from no gambling to pathological gambling does provide a useful model to develop a comprehensive system of treatment, but it does not carry sufficient details to present a scientific explanation for the emergence of pathological gambling. Nevertheless, a list of important terms used in this report is listed below for reference (see Box 1.1).

Box 1.1 Important Gambling Terms Used in this Report

- **Compulsive Gambling**: The original lay term for pathological gambling, it is still used by Gamblers Anonymous in the U.S.A. and throughout most of the self-help treatment communities.
- **Disordered Gambling**: Inspired by the language in DSM pertaining to Disorders of Impulsive Control and used by Shaffer et al. (1997) in their meta-analysis to serve as a conceptual container for terms associated with gambling related problems and pathology. Here in Hong Kong, the term is sometimes used by workers of the two Treatment Centres to describe the combination of problem and pathological gambling.
- **Excessive Gambling**: Referred to an amount of time and money spent in gambling that exceeds an arbitrarily defined acceptable level.
- **Recreational Gambling**: Gambling for entertainment or social purposes, with no harmful effects.
- **Social Gambling**: Synonymous with recreational gambling.
- **Problematic Gambling**: Synonymous with either disordered gambling or excessive gambling.
- **Pathological Gambling**: A mental disorder characterized by a continuous or periodic loss of control over gambling, a preoccupation with gambling and with obtaining money to gamble, irrational thinking, and a continuation of the behaviour despite adverse consequences.

2. Evaluative Study on Service Output and Effectiveness of the Two Treatment Centres

2.1 Introduction

In September 2004, the Home Affairs Bureau (HAB) commissioned the Department of Applied Social Sciences of the Hong Kong Polytechnic University to undertake an evaluation study on the effectiveness of the Counselling and Treatment Centres for Problem and Pathological Gamblers. A research team led by Prof. Cheng Chi Ho, Howard, was set up in late September 2004 to plan and implement the related research activities. The purpose of the study is to monitor the progress and evaluate the effectiveness of the two Centres with the following specific objectives:

a. to conduct a comprehensive review on the overall adequacy and effectiveness of the counselling and treatment Centres;
b. to examine the validity and usefulness of the screening tools adopted by the two Centres in assessing the nature and severity of the gambling-related problems of the clients;
c. to identity factors underlying the success or failure in rendering services (case, group and other related service); and
d. to make recommendations to the Government on how best to provide counselling and treatment services for problem and pathological gamblers in Hong Kong in the longer term.

2.2 Research Design and Methodologies

2.2.1 A number of evaluation approaches have been proposed by different researchers. For example, in evaluating the impact of social service intervention (Darry Scott B, 2000), it was suggested that there are three dimensions to be evaluated:

a. formative evaluation, the focus of which is to evaluate the operational process, its strengths and weaknesses;
b. summative evaluation, which measures clients' overall performances after entrance in the help process. Such evaluation will be conducted mainly through prior and post analysis to find out the impact on the attainment of new insight, knowledge, attitude and behavioural changes as a result of receiving services/treatments;

c. correlative evaluation, which is concerned with the evaluation of the entire input throughout and output process of service delivery. The focus is to assess the aspects and elements of service design and delivery that are related to the formative and summative measures of performance.

2.2.2 Based on the above framework, the methodologies employed in this study include:

a. literature review (both local and overseas) – to develop service model "protocol" for monitoring and evaluating the two Centres;
b. sensitivity-specificity test – to examine the validity and usefulness of screening tools used by the two Centres;
c. longitudinal studies and in-depth interviews – to assess changes in gamblers and their significant others over a period of time before and after treatment;
d. documentation studies and interviews/focus group discussions with service providers so as to examine the "interactive aspect" and effectiveness of the services provided.

2.3 Scope and Content of the Evaluation

2.3.1 The research team divided all categories to be measured into the following five major components which formed the backbone of the study:

a. Component I: Service input

The research team will study thoroughly:

- the Funding Service Agreement, hardware and software that constitute the basis of the services rendered by the two Centres;
- financial resources, human resources and facilities, etc.;
- sensitivity and specificity of the screening tools;
- constraints imposed by laws and regulations.

b. Component II: Service operation & output

In-depth evaluation will be carried out in the following aspects:

- Why and how the screening tool is being utilized?
- What kind of staff-client relationship is being established?
- What service model is being adopted?
- How the service model is being effectively implemented?

Key indicators for measurement on service output include:

- total number of cases, sessions and amount of time provided in individual/family counselling and treatment;
- total number of participants, sessions and amount of time provided for groups held by different nature;
- total number of calls received and amount of time provided by the hot-line;
- total number of training sessions/educational programmes provided, amount of to time involved and number of participants in-took;
- total number of public education programmes conducted and impact measures.

c. Component III: Treatment effects on problem/pathological gamblers

Key outcome indicators for measurement:

- abstinence;
- declined gambling frequency;
- better financial management;
- better impulse control;
- improved self-esteem;
- more stable emotional conditions;
- better social relationships;
- better family relationships

d. Component IV: Service outcome on service-users and his/her significant others

Key outcome indicators for measurement:

- improved mental health through problem solving and coping skills;
- more able to offer effective support to problem/pathological gamblers, etc.
- improved relationship with problem/pathological gamblers, etc.

e. Component V: Service outcome on service providers

Key indicators for measurement:

- improved knowledge;

- improved professional skills in providing case and group work services for problem/pathological gamblers;
- involvement in other related programmes and its effectiveness.

2.4 Activities taken by the Research Team from October 2004 to the end of February 2006

2.4.1 On 31 March 2005, the research team submitted the first progress report to HAB with the following tasks being completed:

Re-organization of the research team

According to the scope and content of the evaluation, the research team had developed into four sub-teams to carry out the required activities:

a. On output evaluation:	Prof. Howard CHENG and Dr. Helen HO
b. On validation of screening tools:	Dr. Irene WONG, Mrs. POON Pik Sheung and Mr. LEE Man Fai (part-time researchers)
c. On outcome evaluation:	Mrs. Jenny HUI, Dr Charles CHAN and Ms. Wacy LUI
d. Overall coordination	Prof. Howard CHENG and Mr. LEE Ka Man

In the meeting held between HAB and the research team on 26 October 2004, it was confirmed that the evaluation study should focus on the services provided to the clients and the participants taken part in various treatment programmes initiated by the two Centres since their commencement. As HAB would conduct a separate study on public attitude and participation in gambling activities, both parties agreed that the surveys on adolescents and general public would be removed from the original research plan, and funds thus released would be diverted to other parts of the study. The research team also agreed that the time frame of the study would be revised. The final report of the evaluation would be submitted to HAB by end of March 2006, while the interim report would be submitted to the HAB in late September 2005.

2.4.2 Between November 2004 and January 2005, the research team had carried out several site visits to the two Centres, collecting relevant information and documents. The research team had also completed literature review and had worked out methodologies for evaluation service output and outcome of the two Centres.

The sub-teams visited the two Centres in late February and early March 2005, again to update the latest development and keep track of the progress. It was agreed that the two Centres would provide the following information and statistics to the sub-teams for compilation and analysis:

a. for service output measurement:
   (i) Number of staff and time spent on enquiries from public on the services;
   (ii) number of gamblers and family cases in terms of current, new, re-opened and closed status;
   (iii) number of referral services provided;
   (iv) amount of resources devoted in individual counselling service and group work sessions;
   (v) record on educational programmes for community and professionals; training and staff development, and
   (vi) time spent in publicity, publications, research, and community liaisons.

b. for validation of screening tools:
   (i) 100 in-depth interviews will be conducted with clients from each of the two Centres.
   (ii) 500 questionnaires on assessing the use of the screening tools, with Tung Wah using DSM-IV and Caritas using SOGS, will be collected from the two Centres for analysis.

c. for service outcome measurement:
   (i) This part of the evaluation targeted at the changes of the Level II problem and pathological gamblers and their significant others after receiving treatment services. Methods of data collection include questionnaire survey, semi-structured interviews, taped observation of the therapeutic sessions, and review of case and group work records.
   (ii) From 1 February 2005 onwards, the first three intake sessions of Level II problem and pathological gamblers and their significant others would be videotaped for analysis. The counsellors of the two Centres were also

asked to report to the research team services rendered to clients in terms of scope, content, quality and methods adopted in their service provision. Such information will be collected and analyzed by means of structured interviews.

2.4.3 Two interim reports on the progress of the evaluation study were submitted to HAB in October 2005 and February 2006 respectively. The findings and implications of the two reports were discussed between the research team and HAB.

3. Pathological Gambling: A Comprehensive Review

3.1 Introduction

It was not until 1980 that pathological gambling (PG) was officially included in the DSM as a disorder of impulse control not otherwise specified (APA, 1994). Since then, the disorder has sparked much speculation and research regarding its nature, etiology and treatment. It is still gaining interest due to the liberalization of gambling and to the recent research that has suggested a possible link between increased rates of PG and increased accessibility to gambling (Campbell & Lester, 1999; Ladouceur, Jacques, Ferland & Giroux, 1999; Productivity Commission, 1999). Liberalization of gambling not only impacts on the growth of the gambling industry by increasing the variety, availability, and accessibility of games; it also increases acceptance and support from societies and governments (Becona, Labrador, Echeburua, Ochoa & Vallejo, 1995). Many researchers agree that this stimulates participation, which eventually leads to gambling problems (Moran, 1970; Productivity Commission, 1999). Studies from different countries have provided evidence that legalization of gambling and increased accessibility to gambling have led to an increase in the number of regular gamblers and problem gamblers (Campbell & Lester, 1999; Emerson & Laundergan, 1996; Jacques, Ladouceur & Ferland, 2000).

While it is difficult to establish causation beyond any doubt, there is sufficient evidence to suggest an association between increased availability/accessibility to gambling and increased PG prevalence rates. The PG literature discusses many different forms of gambling, such as casino gambling (e.g. roulette, black jack), pari-mutuels (e.g. horse races), gaming machines and lotteries. These different forms of gambling have shown to have the potential of becoming problematic at

varying degrees, but recent research suggests that gaming machines, especially modern video gambling machines, are now the leading form of gambling by PGs treated in several countries (Fisher & Griffiths, 1995). More recently with computer technology advances, gambling on the Internet has been developed. Internet gambling (similar to gaming machines) also has the potential to become problematic due to its easy accessibility, rapid event frequency, and short payout intervals. Gambling on the Internet also allows anonymity as it enables one to play in the privacy of one's own home (King & Barack, 1999).

Several authors had reviewed the gambling and PG literature in the past (Allcock, 1986; Lesieur & Rosenthal, 1991; Murray, 1993). However, since then many studies had been completed which provided new information regarding the nature, etiology, and treatment of PG. Although a recent review (Zuckerman, 1999) had discussed a wide range of factors using a diathesis-stress model to explain the development and maintenance of PG, it did not comprehensively address certain factors, e.g. the cognitive and sociological factors. It also failed to discuss theoretical models which attempted to explain the development and maintenance of this disorder. Thus, there is currently a need for a comprehensive review of the research in this area, particularly within the Chinese communities.

3.2 Demographics

PGs generally appear to be a heterogeneous group. However, a number of groups were reported to be more likely to gamble and/or to develop PG. Several factors including low socio-economic status, lack of employment, low education levels, and low income are linked to greater rates of PG (Hraba & Lee, 1995; Ladouceur, 1991; Shepherd et al., 1998; Volberg & Steadman, 1988).

Some studies have indicated that more males than females are identified as PGs (Volberg, 1994; Volberg & Steadman, 1988; Wood & Griffiths, 1998), whilst others have not (Hing & Breen, 2001; Ohtsuka, Burton, DeLuca & Borg, 1997). Research has documented that there are gender differences in gambling attitudes (Abbott & Cramer, 1993), betting behaviour (Bruce & Johnson, 1994), forms of gambling preferred (Hing & Breen, 2001), extent of gambling (Hraba & Lee, 1996), and differences in problems presented for treatment as well as treatment outcomes (Crisp et al., 2000). Researchers have suggested that there might also be some gender differences in the motivation towards gambling. Several studies indicate that females would try to get away from personal or family problems (e.g.

loneliness, isolation, and depression) by gambling, whereas males tend to go after excitement and to win money through gambling (Brown & Coventry, 1997; Lesieur & Blume, 1991b). The exact nature of gender differences in the motivation towards gambling is still unclear.

Although some surveys have reported that PGs appear to be disproportionately young (Sommers, 1988; Volberg, 1993), these findings have no support from others (Legarda, Babio & Abreu, 1992; Volberg & Steadman, 1989). While the state of research done on youth and adolescent gambling is on the rise, there is still, however, a lack of research on gambling behaviour in the elderly circle. Reasons for such a lack of research among the elderly are unclear. There are some suggestions that this group is vulnerable to begin gambling and consequently develop into PG (McNeilly & Burke, 2000, 2001; Stewart & Oslin, 2001). This is especially significant as many elderly are on rigid incomes and even small losses can bring about significant financial and legal consequences (Stewart & Oslin, 2001). There is also a lack of awareness of the disorder among this group and they are more likely to hide or deny their gambling habit due to religious beliefs or age-related perceptions of how senior adults should morally and ethically behave (Bazargan, Bazargan & Akanda, 2001).

There are also differences between people who pursue different types of gambling. Smart and Ferris (1996) found that lottery players, when compared with other gamblers, were more likely to be female, poorer, and older. Kroeber (1992) found that gamblers who played game machines excessively began to play at a younger age (average age of 19 vs. 30 years), and were more likely to be of lower socio-economic status when compared with excessive roulette gamblers. It was also found that excessive roulette gamblers had significantly a more disturbed personality and often had a more psychosocially disturbed lifestyle (e.g. loneliness, social decline, large debts, and criminal lifestyle) when compared with machine gamblers. Currently, very little research exists, both in America and Australia, to explore why different groups of individual choose different forms of gambling and the processes involved in determining which forms of gambling are chosen. **Finally, gambling is deeply rooted in Chinese culture. Recreational gambling without serious adverse effect is always considered a socially acceptable behaviour among the Chinese. Gambling activities are very common in Hong Kong as well. The 2001 survey by the Hong Kong Polytechnic University indicated that 78% of the 2004 adult respondents gambled in the past year and the three most popular forms of gambling were Mark Six; mahjong and horse-racing. Indeed, the majority of**

Hong Kong people gambles for entertainment, and perhaps only a small proportion of individual gambles excessively.

3.3 Factors which have an impact on the development and maintenance of PG

No motive for gambling has been consistently identified among social gamblers and PGs (Murray, 1993). The exact reason why one starts gambling is still unknown. Several motivations are implicated in literature. These include demonstrating one's worth, getting approval and social acceptance from others, rebelling, relieving negative and painful emotions (e.g. anger. depression, frustration, and anxiety), hoping to win, participating due to social reasons, trying to beat the odds, taking part in a favorable activity, a desire to experience the excitement (e.g. to reduce boredom), killing time, and having fun (Blaszczynski, 1995; Cotte, 1997; Dumont & Ladouceur, 1990; Griffiths, 199la, 1993a; Productivity Commission, 1999).

Chantal, Vallerand and Vallieres (1995) identified two categories of motivational profile for gamblers; the self-determined motivational profile (SDMP) and the non-self-determined motivational profile (nSDMP). The SDMP included intrinsic motivation (e.g. gambling for excitement, a sense of accomplishment, or an opportunity to broaden knowledge) or identified regulation (e.g. gambling to reach a goal such as socializing with friends). The nSDMP included external regulation (e.g. gambling to gain external rewards such as to win money). They had measured motivation among 186 male and 59 female gamblers who bet on horses and found that those with high-SDMP were more involved in gambling and more likely to continue gambling than low-SDMP gamblers, who gambled for external reasons (e.g., to win money). Chantal and Vallerand (1996) also found that subjects with SDMP were more involved in skill games (e.g. horse racing) which possibly encourage fun and self-involvement and are challenging. Individuals with nSDMP were more involved in games of luck (e.g. lottery) which possibly prohibit self-involvement and orient gamblers towards material gains.

Research continues to determine factors that encourage individuals to begin gambling or to continue gambling despite continuous losses and thus, increase their chances of developing into PG. At present, several variables have been identified in the gambling literature as playing a role in the development and maintenance of PG. **These include familial factors** (social learning and genetics), **sociological factors** (social factors) **and individual factors** (personality,

biological/biochemistry, cognition, and psychological states) (Zuckerman, 1999; Ocean & Smith, 1993; Coventry & Norman, 1997; Steel & Blaszczynski, 1998; Meyer & Stadler 1999; Toneatto, 1999; Black & Moyer 1998; Grockford & el-Guebaly, 1998).

3.4 Main Theories and Treatment of PG

Several researchers have attempted to produce theoretical models to explain the development and maintenance of PG. Although in the past, psychodynamic explanations were predominant (Bergler, 1957; Freud, 1928), several theoretical orientations have since been put forward, including the medical model (Blume, 1987), behavioural models (Brown, 1987a; McConaghy, 1980), psychologically based models (e.g. Jacobs, 1986), and more recently, cognitive- behavioural (CB) models (e.g. Sharpe & Tarrier, 1993). Other theoretical orientations (already discussed earlier) include the sociological (Ocean & Smith, 1993), biological/physiological (e.g. Blanco et al., 2000; Roy et al., 1988) and personality-based explanations (e.g. Zuckerman, 1999). Some of these models of PG and their relation to treatment are reviewed below.

3.4.1 Psychodynamic model

The first attempt to conceptualize PG was taken in the early 1900s by psychoanalysts. They emphasized that gambling was the expression of an underlying neurosis that was connected to the pregenital psychosexual stages (Greenson, 1947; Hattinger, 1914). Simmel (1920) stated that PGs feel denied by love and attention of parents and long for erotic satisfaction. This created a void of pleasure, excitement, and promise of gain which gambling appeared to be able to fill. Psychoanalysts (Fenichel, 1946; Freud, 1928) explained gambling was an unconscious substitute for unresolved sexual conflicts. According to Freud (1928), gamblers did not play for money but rather for the action of gambling itself. They also gambled to lose, as losing was a means of self-inflicted punishment to atone for guilt over the compulsion to masturbate, which in time was related to unresolved Oedipal conflicts. With regard to the role of masochism, Lesieur and Custer (1984) had observed that some gamblers who initially had a period of winning could continue gambling for a longer period of time, whereas a masochist would not be expected to do this. Rosenthal (1987), however, argued that masochist did substantially well in many activities and only started destroying them once they become important to them. They used defense

mechanisms such as denial and omnipotence as well as splitting, projection, idealization, and devaluation to delude themselves and others (Rosenthal, 1986). Many PGs fit the criteria for narcissistic personality disorder or show noticeable narcissistic characteristics (Blaszczynski & Steel, 1998; Rosenthal, 1986). Other psychodynamic orientated authors such as Livingston (1974) and Taber et al. (1986) supported Rosenthal's view that PG was related to narcissistic personality and related defense mechanisms.

Thus, in consideration of the psychoanalytic explanations put forward so far, there appears to be three major aspects of the psychoanalytic theory of PG. These include gambling being an unconscious substitute for pregenital libidinal and aggressive outlets associated with Oedipal conflicts, a desire "for punishment in reaction to the guilt," and a means for recurrent "re-enactments, but not resolutions, of the conflict'' (Allock, 1986, p. 262). The main strength of psychodynamic models is their in-depth focus on the internal processes, which may lead to problem gambling. In addition, the case study-based literature is useful for describing and detailing the progress of problem gambling and its treatment. However, the psychoanalytic rationalizations tend to overlook social factors as they mainly deal with unconscious impulses of the gamblers (Graham & Lowenfeld, 1986). Most of the "evidence" put forward is based on single case histories and elaborated speculation and thus, tends to be descriptive and wordy. They also do not sufficiently explain why the individuals gamble in the first place, or how PG is developed or maintained (Allcock, 1986). Psychodynamic hypotheses are also very difficult to test (Allcock, 1986).

3.4.2 Recent psychologically based theories

Recent psychological based theories seem to provide some solid ground for further research. These include addiction-based, social learning (behavioural), and Cognitive-Behavioural Models.

(i) Addiction-based theories

Some of the premises for psychologically based theories are taken from the understanding that PGs are similar in many ways to individuals with other addictions, such as substance disorders (Lesieur & Rosenthal, 1991). Jacobs (1986) presented a general theory of addictions, including PG, where he proposed a common dissociative phenomenon that helps addicts escape

from psychological distress. He defined addiction as a dependent state acquired over time (by a person who is predisposed) to relieve stress. Furthermore, he suggested the importance of two inter-related predisposing factors to addictions including an inherited abnormal unipolar physiological resting state (in which an individual is chronically over, or under, stimulated) and childhood experiences that result in feelings of inadequacy, rejection, and/or guilt (Jacobs, 1986). There are some support for this, in treatment samples (Jacobs, 1988), community samples (Kuley & Jacobs, 1988), and among adolescents (Gupta & Derevensky, 1998b).

Many authors have identified similarities between PG and other addictions and, thus, considering PG as an addiction rather than an impulse control disorder. Lopez Viets (1998) outlined several ways in which PG is similar to other addictions. PG and other addictions have a high state of arousal, both being activities that enable one to escape life's problems, both have similar symptoms such as cravings, tolerance, and withdrawal, and addicts have similar psychological profiles. Furthermore, there is high co-morbidity between gambling and other addictions (Lesieur & Rosenthal, 1991; Lopez Viets, 1998). However, she also emphasized that there are clinically important differences between the two. PG involves psychological dependence, whereas substance addiction involves physiological dependence (Walker, 1989). Lesieur (1994) had suggested other major differences including the phenomenon of chasing, which is unique to PGs, and the fact that gamblers can hide their problems more easily due to fewer physical signs (Lopez Viets, 1998).

(ii) Learning theories (social learning and behavioural theories)

From the early 1950s, behavioural explanations of PG emerged. Learning theorists view gambling as a learned behaviour which was a result of a combination of classical and operant conditioning, where gambling behaviour was reinforced through intermittent schedules of reinforcement (Anderson & Brown, 1984; Dickerson, 1979). Researchers in this field, however, had emphasized different reinforcers including intermittent gains such as the money won (Moran, 1970), the excitement related to the gambling situations (Brown, 1986), or the mechanisms of behaviour completion (McConaghy, Armstrong, Blaszczynski, & Allcock, 1988). Negative reinforcement may operate through reduction of aversive stress

states by escaping from life problems and distress as they could narrow their attention while playing (Blaszczynski & McConaghy, 1989a; Diskin & Hodgins, 1997). The models assume that there may be underlying physiological or psychological mechanisms which predispose individuals towards gambling as a response to specific stimuli or situations.

There were criticisms on behavioural theories of PG too. Sharpe and Tarrier (1993) had criticized behavioural explanations for not being "clinically oriented" and not acknowledging how complicated gambling behaviour are, as they concentrated on only one mechanism and ignored other crucial ecological and cognitive influences. Behavioural models also failed to acknowledge the importance of internal events, as they tended to under-estimate the power of individual motivation, emotions, and perceptions to influence outcomes, and over-estimate the effects of external social factors (Brown, 1998). They also failed to account for the role of punishment (e.g., the costs of gambling) in encouraging the termination of gambling (Blaszczynski & Silove, 1995).

Behavioural treatment studies have, however, provided some of the most comprehensive treatment literature on PG. Treatments based on learning principles (i.e., behaviour modification) have involved aversion therapy using physical stimuli (Barker & Miller, 1966, 1968; Goorney, 1968), controlled gambling/behavioural counselling (Dickerson & Weeks, 1979), positive reinforcement of gambling abstinence, paradoxical intention (Victor & Krug, 1967), covert sensitization (Bannister, 1977; Cotler, 1971), and imaginal desensitization (McConaghy, Armstrong, Blaszczynski, & Allcock, 1983). These have been administered singularly or in a combination. However, due to methodological shortcomings in such studies, it is difficult to assess how effective these treatments are. Most of these treatment studies have small sample sizes and limited follow-up periods.

(iii) Cognitive-Behavioural (CB)

Harris (1988) presented a comprehensive formulation of a theoretical CB model for gambling basing on the CB model of addiction and Marlatt's (1985) model of addiction relapse. It highlighted that [by] functional cognitions, perceptions, and motivations for gambling, and poor coping skills were important factors in the development and maintenance of gambling problems.

However, Blaszczynski and Silove (1995) criticized Harris's model for being too broadly descriptive and not supporting a specific theoretical cognitive model. They also stated that it failed to outline the nature and source of dysfunctional cognitions.

Sharpe and Tarriers (1993) heuristic model is one of the most comprehensive CB models that exist to explain the development and maintenance of PG. The model takes account of a range of variables which play a role in the development and maintenance of PG. It supports Anderson and Brown's (1987a) view that gambling is achieved via the principles of operant and classical conditioning. They assume that physiological arousal during gambling is initially reinforced by monetary reward and later becomes conditioned to the gambling situation. The complicated interactions between the physiological (e.g., increased autonomic arousal such as increased heart rate), cognitive (cognitive distortions), and behavioural correlates associated with PG operate at the initial stages of gambling. Reinforcement contingencies increase the likelihood that the gambler continues to gamble and, consequently, connections formed between these variables. Development of gambling problem is mainly mediated by poor coping skills (e.g. control over autonomic arousal, ability to challenge cognitions and delay reinforcement, and problem-solving skills), which encourage the gambler to continue gambling. This excessive gambling is maintained by the consequences of gambling (e.g. social pressures, substance dependence, low self-esteem, and stress), which act by reducing the availability of coping resources.

Although CB models appear to be more refined than the previous behavioural ones, and have been found to be effective in formulating and dealing with problem gambling, they have not yet been rigorously tested by using controlled groups or comparing with other treatments. Four multimodal outcome studies, with a CB component (Lesieur & Blume, 1991a; Russo, Taber, McCormick, & Ramirez, 1984; Schwarz & Lindner, 1992; Taber et al., 1987) have reported high success rates in regard to treatment of PG. However, due to the inclusion of other treatment components, it is difficult to assess the efficacy of the CB component. Outcomes of two case studies (Bannister, 1977; Toneatto & Sobell, 1990) and, recently, **several controlled studies (Echeburua, Baez, & Fernandez Montalvo, 1996; Ladouceur & Sylvain, 1999; Sylvain et al., 1997) have shown cognitive behaviour therapy**

(CBT) to be an effective treatment for gambling problems. Several studies have also shown that the cognitive restructuring aspect of CBT can significantly reduce PG symptoms (Gaboury & Ladouceur, 1990; Ladouceur et al., 1989, Ladouceur, Sylvain, Letarte, & Giroux, 1998).

3.5 Discussion on existing models and available treatments

Although all the theoretical models of problem gambling have strengths and weaknesses, they provide valuable insights into the development of PG and the characteristics of pathological/problematic (p/p) gamblers. There are more points of agreement than disagreement on the causes of gambling problems across the approaches. Most theoretical approaches agree, at least partially, that PG may be a consequence of physiological or psychological predispositions, and that there are triggers for the behaviour such as negative emotions or stressful events (Ferris et al., 1999). These triggers create an unpleasant state for PCs. either emotionally or physiologically, which gambling helps normalize to a preferred state. Disagreements among researchers seem to be related to the emphasis placed on each of these factors. Those outside the clinical field tend to regard social and environmental factors as the vital factors in conceptualizing PG, while psychologists and psychiatrists tend to emphasize that the gambling problems are related to internal factors (Ferris et al., 1999). Thus, treatment for the latter focuses on changing the behaviour or addressing the biological predisposition of the individual in order to address the gambling problem.

Most of these theoretical perspectives tend to focus on characteristics of the most seriously affected problem gamblers, while the profile of the less affected or episodic gambler remains less well understood. The theoretical models that try to explain the development and maintenance of PG tend to be restricted in their conceptualization (Blaszczynski & Silove, 1995). They either concentrate on single biological or individual psychological variables or a few simple mechanisms to explain the development or maintenance of PG, without considering the heterogeneity that exists among PGs. It is likely that the processes contributing to PG involve a complex and dynamic interaction between intrapsychic, biological, social, ecological, psychophysiological, developmental, cognitive, and behavioural components. Thus, all these factors need to be assessed and, if necessary, targeted within a treatment plan in order to get the best possible success rate. There is currently no theoretical model comprehensive enough to account for the complex interaction of these factors, nor to illustrate the

"pathogenic process leading to the transition from controlled PG, its persistence and maintenance over time, and why relapse occurs after periods of control/abstinence" (Blaszczynski & Silove, 1995, p. 196). Thus, in recent years, most professionals are taking the eclectic view that these factors play an interactive role in the development and maintenance of PG (Shaffer et al., 1997).

Despite a range of theoretical models, no one single treatment approach currently exists to treat PG. The ultimate goals for treatment (abstinence or controlled gambling) have also differed, depending on the theoretical model adopted. Lopez, Viets and Miller (1997) provided a comprehensive literature review of the treatments available for PGs and found that the main treatment approaches include cognitive, behavioural, psychodynamic, and multimodal.

4. The Counselling and Treatment Centres for Problem and Pathological Gamblers

4.1 Although gambling is ubiquitous, and many people partake in it as a relatively harmless pastime, some individuals appear to make poor decisions when chances influence outcomes. Indeed, the behavioural and perplexing nature of pathological gambling has led to numerous interpretations and methods for managing individuals with gambling problems. In June 2001, the HKSAR Government issued a consultation paper on Gambling Review. The paper highlighted, inter alia, the need to understand and address the negative impact of gambling in Hong Kong. The results of the consultation indicated that there was overwhelming public support for taking appropriate educational, preventive, and remedial measures in this regard. Upon the release of the consultation results on 22 March 2002, the Government made a commitment to devise an implementation plan to provide counselling and treatment services for pathological gamblers, as well as launching educational programmes on gambling-related issues. In September 2003, the Government set up the **Ping Wo Fund** (the Fund), a charitable fund to finance the preventive and remedial measures for gambling-related problems. The ambit of the Fund is to finance the counselling and treatment services for problem and pathological gamblers, public education campaigns on problem gambling and gambling-related issues as well as researches on gambling-related problems.

4.2 The Caritas and The Tung Wah Group of Hospitals were selected to operate two pilot counselling and treatment centres for problem and pathological gamblers for a duration of 3 years in September 2003. The two Centres, financed by the **Fund**,

commenced operation in October 2003, with the following objectives:

a. to provide specialized counselling and treatment services for problem and pathological gamblers and their family members (significant others);
b. to facilitate the development of best practices and expertise in screening, and counselling and treatment services for problem/pathological gamblers, as well as the requisite network with the concerned parties;
c. to implement public education and preventive measures aimed at delivering messages to the general public on the inherent risks of gambling, and issues relating to problem and pathological gambling, as well as fostering a responsible attitude amongst the gambling population.
d. to collate appropriate data and statistics for the sake of enhancing better understanding about the behaviour and risk factors of problem and pathological gambling.

4.3 The two treatment Centres first started their services in Wanchai and Tsuen Wan respectively in October 2003. They have been able to identify their service characteristics and focus and can work according to their service agreement with the HAB. As stated in the Interim Report I, the contracted caseload of pathological gamblers reached 500 within a year after the two Centres commenced operation. As far as service provision is concerned and according to the nature and scope of the treatment programmes provided, **Level I** services concentrated on the operation of hot-line/help-line services. Through the hot-line/help-line services, information giving and initial assessment for those potential service-users were successfully launched. **Level II** services focus on individual counselling, and treatment group sessions which are offered to p/p gamblers and their family members. This is where screening had taken place (The SOGs and the DSM-IV). Subsequent to the cases being screened and established, services at this level have taken up most resources of the two Centres. **Level III** services require working closely with psychiatrists to deal with those pathological gamblers in relation to the latter's mental conditions, abilities of self-control, assessment and diagnosis in order to decide the appropriate means of treatment, such as the use of medicine or referral for institutional care. Data also reflected that the two Centres have placed manpower and resources in community education and publicity activities. The two Centres also received visitors from various community groups, individuals and visitors from overseas.

4.4 The Caritas Addicted Gambling Counselling Centre (明愛展晴中心)

4.4.1 The Chinese name of the Caritas Addicted Gambling Counselling Centre has the meanings of "looking ahead for the future and sunny days will come again". The Centre is named this way to signify that service-users who receive counselling from the Centre will change their addicted gambling behaviour to rebuild a new life. The mission of the Centre is to help addicted gamblers to get rid of the gambling behaviour, regain satisfactory family life and develop a healthy lifestyle. The target service-users are pathological/problematic (p/p) gamblers and their families. The major objective of the services is to encourage these people to take a positive and proactive approach to resolve the problems caused by gambling such as debts, broken family relationships, self-destructive behaviour, etc.

The Centre is a service unit under the Caritas Family Service. Caritas Family Service consists of 8 IFSCs (Integrated Family Service Centres), a centre for supporting families in crisis and three rehabilitation centres for drug addicts. There are four clinical psychologists working full-time for Caritas Family Service. The services of the Addicted Gambling Counselling Centre could draw on the resources and expertise of these units directly or indirectly to support users and their family members. With this compatible service network, the capacity and the effectiveness of the Centre are greatly enhanced.

The supervisor of the Centre has over 20 years of practical social work experience and a rich knowledge in gambling counselling. He is specialized in casework and small group work on sex abuse and drug abuse. He has also attained seven years of supervisory experience, good social and community networks and active involvement in research, education and advocacy for anti-gambling. The Centre at present has 23 consultants who are experts from different professions. They give advice on the operation of the services, as well as in the field of staff training and development.

4.4.2 The Centre defines the service-users (Level II cases) as:

a. Problem gamblers – Persons who have the problems caused by gambling in personal health, work and employment, studying, family relationships, finance and budgeting, and interpersonal relationships.
b. Pathological gamblers – Persons who would lose control, or are obsessive and

indulgent in gambling without considering the consequences of their behaviour; and whose personal, family and social functioning is negatively affected as a result of their gambling behaviour.

The Centre uses SOGS and DSM-IV as the screening tools in establishing the identity of (i) or (ii) among its users. In addition, the "Eight Gambling Screen" is also used to attract the attention of the potential users and heighten their awareness to their need to seek help. Cognitive behavioural intervention and family therapy are the major counselling approaches used. For cases which involve family violence or family debts, the Centre will seek advice from, or on the other hand work collaboratively with, the Caritas Family Crisis Support Centre (明愛向晴軒). In this connection, users can benefit more and the effectiveness of the service enhanced.

4.5 The Tung Wah Group of Hospitals Even Centre (東華三院平和坊)

4.5.1 With the establishment of the "Cross Centre" (Counselling Centre for Substance Abuse), Family Debts Counselling Centre and family casework programme, the Tung Wah Group of Hospitals (TWGHs) have been providing professional counselling to individuals and families who are affected by problem gambling, long before the setting up of the Even Centre in 2003. The Even Centre now delivers a comprehensive programme network to individuals and families who are adversely affected by pathological gambling. It specialized in providing client-centered services for gamblers and has been receiving significant support from the TWGHs Board of Management in terms of premises, rent and management fees.

Although functioning as an independent unit, the Even Centre maintains strong professional linkages with other service units of the TWGHs, particularly with the Financial and Debt Counselling Unit; the Tung Wah Cares Hotline; the TW Alcohol and Drug Counselling Services, the TW Family Casework Centres; the TW Temporary Shelter and Emergency Fund. With such a comprehensive network, the capacity and the effectiveness of the Centre are greatly enhanced.

With a strong and relevant education and professional training in Australia, the supervisor of the Centre is an expert in the planning and implementation of gambling treatment programmes. She is specialized in casework services and family therapy, and has keen interest in gambling research studies. Currently, the

Centre has 6 local and overseas consultants who are experts in counselling and psychotherapy. One of them is actively involved in professional consultation and staff development for the staff members of the Centre.

4.5.2 The Centre uses the DSM-IV as the core screening tool for identifying and assessing Level II cases. In addition, the Gambling Related Cognitive Scale (GRCS) and the Gambling Self-efficacy Questionnaire are also employed to measure clients' changes before and after receiving treatment. As far as intervention methodologies are concerned, systemic family therapy and cognitive-behavioural intervention are the major counselling approaches used. On the other hand, the Even Centre is keen to develop culturally relevant treatment programmes for local gamblers. In November 2005, the Centre successfully hosted the Inaugural Asian Pacific Problem Gambling Conference supported by its parent organization, the TWGHs. All these reflect their enthusiasm and commitment in contextualizing gambling preventive and rehabilitation services in Hong Kong.

5. Major Findings

5.1 Validation of Screening Tools

5.1.1 Introduction

Screening, a process by which the client is determined eligible for admission to a particular intervention programme, is essential before professional assessment, intake and treatment are provided. Screening is commonly accomplished by using translated western instruments in the local treatment field. A Chinese modified version of the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987) and a Chinese 10-item questionnaire composed of the ten translated diagnostic criteria of the DSM-IV (APA, 1994) have been adopted as the screening tools at the Caritas A.G. Centre and the Even Centre respectively since service commencement (see Appendix A). However, the psychometric properties of these Chinese screens have never been investigated, although the original English measures have supporting psychometric evidence. An effective screening instrument must be reliable (able to yield stable measures or results) and valid (able to measure what it is intended to measure) (Norusis, 1990). One of the main objectives of this entire study is to examine the reliability and validity of the screening tools used by the two Centres.

5.1.2 Method and Samples

Both the Chinese DSM- IV questionnaire and the Chinese SOGS were translated from English by the counsellors of the Centres. The Chinese DSM-IV questionnaire has been employed to screen gambling behaviour among the adult gamblers who seek professional treatment in the past year, whereas the Chinese SOGS has been revised (items 1, 2, 3 and 12 were deleted from the original screen) to measure gambling behaviour in the past six months. During the period of October 2003 to April 2005, a total of 501 clients filled a self-administered Chinese SOGS, and 679 adult clients received a standardized screening conducted by the counsellors of the Even Centre, using the Chinese DSM-IV questionnaire within a similar span of time. On the basis of the responses of the 501 and 679 gamblers to the Chinese SOGS and the Chinese DSM-IV questionnaire, the reliability and validity tests were conducted.

5.1.3 Results

a. Reliability and Validity of the Chinese SOGS

Reliability (i.e., internal consistency) of the screening instruments was examined with Cronbach's alpha coefficient (Cronbach, 1951). The result indicated that the Chinese SOGS demonstrated unsatisfactory reliability (Table 1 in Appendix A). The internal consistency for the Chinese SOGS was low (Cronbach's alpha = 0.25). A review of the individual items in the scale indicated that all the items had corrected item - total correlations below 0.3, which is considered as an acceptable measure (Banks et al., 1980).

The construct validity of the Chinese SOGS was examined by investigating its factorial structure via factor analysis (Harman, 1967). A principal component analysis (Norusis, 1990) was performed on the item responses of the clients. The analysis showed that eight factors with eigenvalues exceeding unity were yielded, explaining 51.20% of the total variance. To avoid over-factoring, further analysis using a screen test (Cattell, 1966) indicated that four factors could be extracted. The four-factor solution which was considered as providing adequate representation of the data was rotated to a Varimax criterion (Norusis, 1990) for interpretation. The Varimax method has been commonly used to minimize the number of variables which have high loadings on a factor to enhance the interpretability of the factors.

The Varimax rotated factor structure of the Chinese SOGS is summarized in Table 2 in Appendix A. The four factors accounted for 34.82% of the total variance. The analysis showed that the factors could hardly be meaningfully interpreted. Furthermore, the results were not similar to those of previous studies (e.g. Stinchfield, 2002). To conclude, the findings indicated that the Chinese SOGS is not reliable and not valid.

b. Reliability and Validity of the Chinese DSM-IV Questionnaire

Findings revealed that the Chinese DSM-IV questionnaire demonstrated low reliability, the Cronbach's alpha = 0.50 (Table 3 in Appendix A). A review of the individual items in the scale showed that only two items (item 1 and item 6) had corrected item-total correlations in excess of 0.3. All the other eight items had corrected item-total correlations below 0.3. In brief, the results show that the Chinese DSM-IV questionnaire is not reliable.

Construct validity of the Chinese DSM-IV questionnaire was tested by factor analysis. A principal component analysis was performed on the item responses of the subjects. The analysis showed that two factors with eigenvalues exceeding unity were yielded, explaining 49.4% of the total variance. The two-factor solution, which was considered as providing adequate representation of the data, was rotated to a Varimax criterion (Norusis, 1990) for interpretation.

The Varimax rotated factor structure of the 10-item questionnaire is summarized in Table 4 in Appendix A. The analysis indicated that the first factor, labeled as dependence or addiction symptoms, explained 37.9% of the total variance. This factor included item 4 (is restless when attempting to cut down or stop gambling), item 1 (preoccupied with gambling), item 2 (need to gamble with increasing amounts of money to achieve the desired excitement), item 3 (repeated unsuccessful attempts to control, cut back or stop gambling), item 6 (after losing money, often returns), and item 5 (gamble as a way of escaping from problems or relieving a dysphoric mood).

Factor 2 represented negative consequences of pathological gambling, accounting for 11.5% of the total variance. Factor 2 included item 9 (jeopardized or lost significant relationship, job or career opportunity), item 10

(rely on others to provide money to relieve a desperate financial situation), item 8 (has committed illegal acts such as forgery, fraud, theft or embezzlement to finance gambling) and item 7 (lie to conceal the extent of involvement). All the items in these two factors had factor loadings exceeding 0.4 (Overall & Klett, 1972). However, there is a lack of evidence for convergent and discriminant validity (Campbell & Fiske, 1959) of the questionnaire. **To conclude, the results show that the Chinese DSM-IV questionnaire is a valid but not reliable measure of pathological gambling in the gambling treatment sample.**

5.1.4 Discussion and Recommendations

a. Despite some content overlapping, the DSM-III criteria-based SOGS and the DSM-IV criteria are not identical. Counsellors must be careful with their purpose and choice when employing a particular screening instrument as the criteria with which the gamblers are screened may differ significantly, and the data to be generated may vary to a considerable extent. The DSM- IV criteria are basically behavioural whereas there are several subjective items in the SOGS (e.g. “feel that you have a problem”, “feel guilty”, “gamble more than you intended to”). Many items of the SOGS explore the sources of borrowing money, but fewer items of the DSM-IV criteria investigate the same topic. Yet, only the DSM-IV criteria include items on withdrawal and tolerance (Stinchfield, 2002). Lastly, a much higher proportion of the SOGS content focuses on the adverse consequences than the DSM-IV criteria. The SOGS has also been criticized for its unidimensionality and middle-class bias. The effects of all these observations on screening have to be examined carefully in the selection of a suitable screening instrument.

b. The validation findings indicate that the Chinese SOGS does not demonstrate satisfactory reliability and validity, whereas the Chinese DSM-IV questionnaire is verified to be valid but not reliable. Previous research concludes that several of the DSM-IV criteria are difficult to establish with a single question (Stinchfield, 2002), perhaps these results could explain why the Chinese DSM-IV questionnaire had unsatisfactory internal consistency. We recommend that gambling researchers and service providers should collaborate to develop culturally appropriate and psychometrically sound screening instruments for our society. Until such time as local screening tools are in hand, using the Chinese versions of validated DSM-IV criteria

screens such as the NODS (National Opinion Research Centre DSM-IV Screen for Gambling Problems, 1999), and the DIGS (Diagnostic Interview for Gambling Severity) (Winters, Speckers & Stinchfield, 1997) will be a feasible alternative.

c. There are other non-DSM screening instruments such as the Gamblers Anonymous Twenty Questions (GA-20), the Canadian Problem Gambling Index (Jackie et al., 2001), etc. As the DSM-IV is more updated and has been more widely accepted as a "gold standard" measure, it will be more effective to use DSM-IV criteria-based screens. However, psychometric validation must be conducted in order to verify the performance and applicability of these "borrowed" western tools, be they DSM or non-DSM criteria based, in the Chinese treatment samples.

5.2 Report on Operation and Service Output (as at 31st, December 2005)

5.2.1 Service output refers to casework services, group work services and other services provided to potential clients, problem and pathological gamblers and their significant others.

a. Data revealed that hotline service and telephone enquiry have been most welcomed and used by potential clients and the general public. Details are presented below:

	Caritas Addicted Gamblers Counselling Centre	**Tung Wah Even Centre**
Total number of telephone enquiries	5661	5395
Average time spent on each enquiry	5 minutes	10 minutes

b. Caseload: Total number of Level II cases (Level II are cases screened as problem and/or pathological gamblers)

	Caritas Addicted Gamblers Counselling Centre	**Tung Wah Even Centre**
Total number of level II cases	1092	1116

c. Caseload: Total number of Level III cases (Level III cases are those who received psychiatric and/or residential treatment services referred by the two Centres)

	Caritas Addicted Gamblers Counselling Centre	**Tung Wah Even Centre**
Total number of level III cases	79	52

d. Casework services rendered to p/p gamblers

	Caritas Addicted Gamblers Counselling Centre	**Tung Wah Even Centre**
Number of telephone/hotline counselling	14828	4649
Average time used	2.0 minutes	12.7 minutes
Number of individual counselling sessions for gamblers	4479	4595
Average time for each session	1.2 hours	1.23 hours
Number of family counselling sessions for gamblers and their significant others	1720	619
Average time for each session	1.3 hours	1.16 hours

In addition to the services listed above, Caritas Addicted Gamblers Counselling Centre also provides email counselling service for gamblers and significant others; home or workplace visits, and escort services. At Tung Wah Even Centre, financial counselling, case conferences, home visits, escort service, and collateral contacts are provided for gamblers.

e. Case Services rendered to significant others

	Caritas Addicted Gamblers Counselling Centre	**Tung Wah Even Centre**
Number of telephone guidance/counselling	4556	1076
Average time used	3.2 minutes	17.7 minutes
Number of individual counselling sessions for significant others	178	1222
Average time for each session	1.8 hours	1 hour
Number of family counselling sessions for significant others and their family members	47	490
Average time for each session	1.5 hours	1.2 hours

In addition to the counselling services listed above, Caritas Addicted Gamblers Counselling Centre also provides email counselling service for significant others. At Tung Wah Even Centre, financial counselling, case conferences and collateral contacts are also provided for significant others.

f. Group Work Services/treatment groups rendered to p/p gamblers

	Caritas Addicted Gamblers Counselling Centre	**Tung Wah Even Centre**
Number of short-term group sessions on therapeutic intervention for gamblers	35	62
Average time for each short-term group session	3 hours	2 hours
Number of psycho-educational group sessions for gamblers	Nil	78
Average time for each short-term group session	N. A.	1.2 hours
Number of peer group counselling sessions	Nil	28
Average time for each group session	N. A.	3 hours
Number of long-term (mutual-help) group sessions for gamblers	146	109
Average time for each group session	2.5 hours	1.8 hours

It was noted that the Tung Wah Even Centre also planned and implemented training camps for its clients. From April 2005 onwards, peer group counselling service has also been offered.

g. Group Work Services rendered to significant others

	Caritas Addicted Gamblers Counselling Centre	**Tung Wah Even Centre**
Number of short-term group sessions on therapeutic intervention	24	Nil
Average time for each session	2.29 hours	N. A.
Number of long-term (mutual-help) group sessions on mutual-help	27	60
Average time for each session	2.9 hours	1.6 hours
Number of psycho-educational group sessions	Nil	10
Average time for each session	N. A.	1 hour

h. Other service output: presented below are staff training and development programmes, staff supervision sessions, educational programmes for general public and training programmes for professionals organized by the two Centres:

	Caritas	**Tung Wah**
Total number of staff training programmes	38	118
Total time used	147.5 hours	625 hours
Total number of supervision sessions	222	177
Total time used	164.25 hours	264 hours
Total number of educational programmes held for the public	39	7

Total number of attendance	3,149	12,290
Total time used	82 hours	28 hours
Total number of educational programmes held for primary and secondary schools	16	24
Total number of attendance	4,421	2,196
Total time used	29.92 hours	37 hours
Total number of educational programmes held for young people (15-24 age group)	12	15
Total number of attendance	632	1,205
Total time used	25 hours	65 hours
Total number of training programmes for social workers	7	32
Total number of attendance	162	895
Total time used	45 hours	52.5 hours
Total number of training programmes for teachers	2	4
Total number of attendance	150	308
Total time used	5.5 hours	24 hours
Total number of training programmes for other professionals	12	30
Total number of attendance	631	1430
Total time used	68 hours	98 hours

i. Total number of closed cases (level II cases) and reasons for closing

Reasons of closing case	**Caritas**	**Tung Wah**
Goal attained (successful cases)	**507 (64.9%)**	**543 (69.1%)**
Lost contact	103 (13.2%)	146 (18.6%)
Missing appointment	Nil	32 (4.1%)
Lack of motivation	168 (21.5%)	38 (4.8%)
Referred to other Centres	Nil	3 (0.4%)
Death of client	3 (0.4%)	1 (0.1%)
Others (family members stopped the clients from using the service; accessibility; failed to show up due to change of job, etc.)	Nil	23 (2.9%)
Total	781 (100.0%)	786 (100.0%)

5.2.2 Evaluation of clients' satisfaction on service provided: Since each Centre has its own evaluation method/system, the findings are presented in a centre-based format.

A) Caritas

a. Responses from gamblers

Among all the closed cases, 323 clients responded to the counselling assessment form. The average service time was 7.3 months. 94.1% were rendered individual counselling service, 40.6% family counselling service, 15.7% mutual-help group service, 4.6% treatment group service, 2.4% joined educational programmes, and 2.2% received other kind of services. Their satisfaction on service quality was shown in the following tables.

Satisfaction of service quality

	Frequency	Percentage
Yes	319	98.8
No	2	0.6
No information	2	0.6
Total	323	100.0

Among the 218 respondents, 98.8% of them were satisfied with the service.

b. Responses from family members

There was a total of 103 members gave feedback on the service. All of them received 8 months' service on average. The kinds of service they received are as follows:

Types of service family members received

	Frequency	Percentage
Individual counselling	73	70.8
Family counselling	83	80.6
Mutual-help group	22	21.4
Treatment group	4	3.9
Educational courses	6	5.8
Others	4	3.9

Most of them would receive individual and family counselling service, and their views on service quality are as follows:-

Significant others' satisfaction on services provided by the Centre

	Frequency	Percentage
Can	101	96.0
Cannot	2	2.0
Missing	2	2.0
Total	105	100.0

96.0% of the respondents were satisfied with the services provided by the Centre.

B) Tung Wah

a. Satisfaction on the process of service delivery

Environment and facilities

	Frequency	Percentage
Not satisfied	4	1.2
Satisfied	149	44.3
Very satisfied	183	54.5
Total	336	100.0

Only 1.2 % of the respondents were not satisfied with the environment and facilities.

Location

	Frequency	Percentage
Very dissatisfied	7	2.1
Dissatisfied	42	12.5
Satisfied	151	44.9
Very satisfied	136	40.5
Total	336	100.0

14.6% of the respondents were not satisfied with the location of the Centre.

Reception workers' attitude

	Frequency	Percentage
Dissatisfied	9	2.7
Satisfied	111	33.0
Very satisfied	216	64.3
Total	336	100.0

97.3% of the respondents were satisfied with the attitude of workers at the reception counter.

Arrangement of counselling and treatment services

	Frequency	Percentage
Very dissatisfied	2	0.6
Dissatisfied	16	4.8
Satisfied	125	37.2
Very satisfied	193	57.4
Total	336	100.0

94.6% of the respondents were satisfied with the arrangement of counselling or treatment sessions.

Adequacy of length of counselling or treatment session

	Frequency	Percentage
Very dissatisfied	1	0.3
Dissatisfied	10	3.0
Satisfied	121	36.0
Very satisfied	204	60.7
Total	336	100.0

Only 3.3% of the respondents were not satisfied with the length of the counselling or treatment session. They either feel that the session is too short or too long.

b. Satisfaction of service quality

Tung Wah also sought feedback from gamblers about the overall provision of their services. The results are as follows:

Overall satisfaction

	Frequency	Percentage
Very dissatisfied	1	0.3
Dissatisfied	7	2.1
Satisfied	107	31.8
Very satisfied	215	64.0
No response	6	1.8
Total	336	100.0

It was noted that only 2.4% of the respondents were not satisfied with services provided by the Even Centre.

Satisfaction of individual counselling

	Frequency	Percentage
Very dissatisfied	2	0.6
Dissatisfied	4	1.2
Satisfied	98	29.2
Very satisfied	226	67.2
No response	6	1.8
Total	366	100.0

96.4 % of the respondents were satisfied with the individual counselling service.

Satisfaction of group treatment

	Frequency	Percentage
Very dissatisfied	1	0.3
Dissatisfied	3	0.9
Satisfied	27	8.0
Very satisfied	27	8.0
Not applicable	270	80.4
No response	8	2.4
Total	336	100.0

Only a few of the respondents received group treatment, and most of them were satisfied with the service.

Contact again when there is need in future

	Frequency	Percentage/valid percentage
No	12	3.6
Yes	318	94.6
No response	6	1.8
Total	336	100.0

94.6% of the respondents would contact the Centre again if they need further services in future.

Would recommend others to the Centre to seek help

	Frequency	Percentage
No	13	3.9
Yes	318	94.6
No response	5	1.5
Total	336	100.0

Only 3.9% of the respondents would not recommend others to receive the same service.

Need for improvement in service

	Frequency	Percentage
No	263	78.3
Yes	60	17.8
Not applicable	1	0.3
No response	12	3.6
Total	336	100.0

17.8 % of the respondents suggested need for improvement (content not being specified).

5.2.3 Evaluation of clients' perception of service effectiveness

A) Caritas

a. Gamblers' perception of service effectiveness:

Caritas used nine dimensions to check gamblers' feedback on service effectiveness.

Self-control in gambling

	Frequency	Percentage
Yes	312	96.6
No	9	2.8
No information	2	0.6
Total	323	100.0

96.6% of the respondents regarded having improved their self-control in gambling.

Effectiveness of the Centre in solving gambling problem

	Frequency	Percentage
Can	301	93.2
Cannot	22	6.8
Total	323	100.0

Among these 323 clients, 93.2% regarded the Centre did help them to solve their problems, while 6.8% regarded not.

Effectiveness of improving family relationship

	Frequency	Percentage
Yes	265	82.0
No	24	7.4
Not applicable	29	9.0
No information	5	1.6
Total	323	100.0

82.0% of the respondents felt that the service was effective in helping them to improve family relationship.

Effectiveness on finance management

	Frequency	Percentage
Yes	276	85.5
No	21	6.5
Not applicable	25	7.7
No information	1	0.3
Total	323	100.0

85.5% of the respondents indicated that their financial difficulties had been eased and their attitude changed to a positive manner.

Improvement in mental health

	Frequency	Percentage
Yes	263	81.4
No	17	5.3
Not applicable	37	11.4
No information	6	1.9
Total	323	100.0

81.4% of the respondents reflected that their mental health was getting much better.

Stop gambling (except social gambling)

	Frequency	Percentage
Yes	263	81.4
No	10	3.1
In progress	46	14.3
No information	4	1.2
Total	323	100.0

81.4% of the respondents indicated that after receiving counselling service, they had stop gambling for more than 6 months.

Effectiveness of work concentration

	Frequency	Percentage
Yes	196	60.7
No	30	9.3
Not applicable	85	26.3
No information	12	3.7
Total	323	100.0

60.7% of the clients claimed that they were more concentrated on their work after receiving services.

Better interpersonal relationship

	Frequency	Percentage
Yes	186	57.6
No	39	12.1
Not applicable	83	25.7
No information	15	4.6
Total	323	100.0

57.6% of the respondents reflected that their interpersonal skills had been improved.

Improvement in physical health

	Frequency	Percentage
Yes	172	53.3
No	41	12.7
Not applicable	97	30.0
No information	13	4.0
Total	323	100.0

53.3% of the clients claimed that their physical health had been improved.

b. Significant others' perception on service effectiveness

Significant others were asked about their views on service effectiveness as a whole, and the results are presented below:

Significant others' view on effectiveness of counselling on solving gambling problems

	Frequency	Percentage
Can	84	80.0
Cannot	19	18.1
Missing	2	1.9
Total	105	100.0

80.0% of the significant others felt that the services were effective.

c. *Counsellors' evaluation of service outcome (for the closed cases)*

	Frequency	Percentage
Maintaining abstinence (except social gambling)	502	64.3
Increased ability to control and manage emotion factors, cost, and other	495	63.4
Sustained and consistent use of structural support	245	31.2
Attained agreed goals in case plan	450	57.6
Improvements in aspects of life which are conducive to eliminating or reducing gambling problems	467	59.8
Positive feedback on achievement and effectiveness of service	498	63.8
Gambling behaviour has improvement	535	75.4
Missing data on closed cases with goal attainment	5	0.6

B) Tung Wah

a. *Feedback from all gamblers who had completed the final assessment form. Tung Wah used six dimensions to check gamblers' feedback on service effectiveness.*

Worker-client relationship

	Frequency	Percentage
Very dissatisfied	0	0.0
Dissatisfied	7	2.0
Satisfied	100	30.0
Very satisfied	229	68.0
Total	336	100.0

98% of the respondents were satisfied with their relationship with the workers.

Goal achievement on abstinence goals

	Frequency	Percentage/ valid percentage
Very dissatisfied	1	0.3
Dissatisfied	27	8.0
Satisfied	117	34.8
Very satisfied	164	48.8
Not applicable	16	4.8
No response	10	3.0
Missing	1	0.3
Total	336	100.0

83.6% of the respondents were satisfied with the achievement of abstinence goals.

Greater capacity to manage the causes of gambling

	Frequency	Percentage
Very dissatisfied	3	0.9
Dissatisfied	24	7.1

Satisfied	125	37.2
Very satisfied	117	34.8
Not applicable	4	1.2
Total	336	100.0

72.0% of the respondents were satisfied with their increased capacity in this aspect.

Participation in groups, interest classes, or other social activities according to schedule

	Frequency	Percentage
Very dissatisfied	85	25.3
Dissatisfied	70	20.8
Satisfied	76	22.6
Very satisfied	63	18.8
Not applicable	42	12.5
Total	336	100.0

41.4% of the respondents were satisfied with their participation in groups, interest classes, and other social activities.

Improvement in life-style and reduction of gambling problem

	Frequency	Percentage
Very dissatisfied	8	2.4
Dissatisfied	28	8.3
Satisfied	115	34.2
Very satisfied	172	51.2
Not applicable	13	3.9
Total	336	100.0

85.4% of the respondents were satisfied with the changes in terms of reducing gambling problems.

b. Differences in perception of gambling problems before and after service received

Results of T-test on the scores of types of problems before and after treatment

Nature of problem	Pre-treatment mean	Post-treatment mean
Gambling related problems	3.84 (113)	0.91 (113)
Financial problems	4.07 (123)	1.55 (123)
Suicidal problems	1.71 (66)	0.27 (66)
Psychological problems/emotional distress	3.70 (121)	1.32 (121)
Family relationship	3.33 (120)	1.28 (120)
Interpersonal relationship	2.33 (105)	0.92 (105)
Work related problems	2.00 (90)	1.07 (90)
Physical health problems	1.89 (83)	0.86 (83)
Emotional problems	2.56 (57)	0.91 (57)

It should be noted that all the means are significantly different (2-tailed) at 0.001 level.

5.2.3 **Client profile:** The total number of Level II cases (p/p gamblers) handled by the two Centres from October 2003 to end of December 2005 were 2208, with 1092 from the Caritas and 1116 from the Tung Wah. The clientele profile are presented below:

Year that the clients received services	**Caritas**		**Tung Wah**	
	Frequency	Percentage	Frequency	Percentage/ valid percentage
2003 (Oct –Dec)	133	12.2	148	13.3/13.3
2004	536	49.1	547	49.0/49.1
2005	423	38.7	420	37.6/37.7
Sub-total	1092	100.0	1115	99.9/100.0
Missing	Nil	Nil	1	0.1
Total	1092	100.0	1116	100.0

a. Sex

	Caritas		Tung Wah	
	Frequency	Percentage	Frequency	Percentage
Male	960	87.9	1005	90.1
Female	132	12.1	111	9.9
Total	1092	100.0	1116	100.0

It was noted that in both Centres, almost 90% of level II cases are male gamblers.

b. Education attainment

	Caritas		Tung Wah	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
No education	9	0.8/0.8	Nil	
Primary	169	15.5/15.8	156	14.0/14.5
Secondary	806	73.8/75.4	785	70.3/72.8
Tertiary	85	7.8/8.0	137	12.3/12.7
Sub-total	1069	97.8/100.0	1078	96.6/100.0
Missing	23	2.1	38	3.4
Total	1092	100.0	1116	

In both Centres, majority of gamblers have had secondary school education.

c. Age distribution

	Caritas		Tung Wah	
	Frequency	Percentage	Frequency	Percentage/ valid percentage
Below 18 (for Tung Wah, it is 18 and below)	2	0.2	3	0.3/0.3
18-25 (for Tung Wah,	74	6.8	73	6.5/6.6

it is 19-25)				
26-29	121	11.1	118	10.6/10.6
30-39	370	33.9	373	33.4/33.5
40-49	331	30.3	374	33.5/33.6
50-59	167	15.3	148	13.3/13.3
60 or over	27	2.4	25	2.2/2.2
Sub-total	1092	100.0	1114	99.8/100.0
Missing	Nil		2	0.2
Total	1092	100.0	1116	100.0

In both Centres, majority of the clients are within the age range between 30 to 59.

d. Marital status

	Caritas		**Tung Wah**	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
Single	286	26.2/26.2	328	29.4/29.5
Married	677	62.0/62.1	649	58.2/58.5
Widow/widower	12	1.1/1.1	6	0.5/0.5
Divorced	55	5.0/5.0	82	7.3/7.4
Separated habitation	27	2.5/2.5	30	2.7/2.7
Co-habitation	26	2.4/2.4	15	1.3/1.4
Re-marriage	8	0.7/0.7	Nil	
Sub-total	1091	99.9/100.0	1110	99.5/100.0
Missing	1	0.1	6	0.5
Total	1092	100.0	1116	100.0

In both Centres, the majority of respondents are married.

e. Employment situation

	Caritas		**Tung Wah**	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
Self-employed	63	5.7/5.8	47	4.2/4.2
Service sector	429	39.3/39.3	434	38.9/39.2
Professional	40	3.7/3.7	42	3.8/3.8

Clerical	74	6.8/6.8	64	5.7/5.8
Civil servant	94	8.6/8.6	97	8.7/8.8
Technician	138	12.6/12.6	102	9.1/9.2
Unemployed	133	12.2/12.2	155	13.9/14.0
Retired			16	1.4/1.4
CSSA recipient	6	0.5/0.5	3	0.3/0.3
Unemployed + CSSA	36	3.3/3.3	8	0.7/0.7
Student	4	0.4/0.4	5	0.4/0.5
Housewife	44	4.0/4.0	26	2.3/2.3
Others	30	2.7/2.7	108	9.7/9.8
Subtotal	1091	99.9/100.0	1107	99.2/100.0
Missing	1	0.1	9	0.8
Total	1092	100.0	1116	100.0

In both Centres, the largest group of respondents is from service sector (服務性行業).

f. Income distribution

	Caritas		**Tung Wah**	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
0	178	16.3/17.0	151	13.5/15.2
1-5000	58	5.3/5.6	43	3.9/4.3
5001-10000	334	30.6/31.9	308	27.6/31.0
10001-15000	242	22.2/23.1	282	25.3/28.4
15001-20000	121	11.1/11.6	57	5.1/5.7
20001-25000	48	4.4/4.6	79	7.1/8.0
25001-30000	30	2.7/2.9	15	1.3/1.5
30001-40000	18	1.6/1.7	37	3.3/3.7
40001 or above	17	1.6/1.6	20	1.8/2.0
Subtotal	1046	95.7/100.0	992	88.9/100.0
Lack of information			31	8.3
Missing	46	4.2	93	2.8
Total	1092	100.0	1116	100.0

The monthly household incomes of majority of the respondents from both Centres are less than $15,000.

g. Residential areas

	Caritas		**Tung Wah**	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
Islands	15	1.4/1.4	21	1.9/1.9
Kwai Chung/Shing	100	9.1/9.2	28	2.5/2.6
Tsing Yi	73	6.7/6.7		
Tsuen Wan	119	10.9/10.9	16	1.4/1.5
Tuen Mun	159	14.5/14.6	17	1.5/1.6
Yuen Long	69	6.3/6.3	6	0.5/0.6
Tin Shui Wai	89	8.1/8.2	8	0.7/0.7
Sai Kung	8	0.7/0.7	8	0.7/0.7
Tseung Kwan O	25	2.3/2.3	64	5.7/5.9
Sha Tin	161	14.7/14.8	41	3.7/3.8
Tai Po	58	5.3/5.3	15	1.3/1.4
Northern District	69	6.3/6.3	23	2.1/2.1
Hong Kong Island	8	0.7/0.7		
Central and Western district			59	5.3/5.5
Wan Chai			32	2.9/3.0
Eastern district			201	18.0/18.7
Southern District			94	8.4/8.7
Kowloon City			85	7.6/7.9
Wong Tai Sin			84	7.5/7.8
Kwun Tong	123	11.3/11.3	134	12.0/12.4
Sham Shui Po			82	7.3/7.6
Yau/Tsim/Mong			57	5.1/5.3
Others	11	1.0/1.0	2	0.2/0.2
Subtotal	1087	99.5/100.0	1077	96.5/100.0
Missing	5	0.5	39	3.5
Total	1092	100.0	1116	100.0

h. The following table shows the ages that the respondents first took up gambling

	Caritas		**Tung Wah**	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
10 or below	27	2.5/2.5	46	4.1/4.6
11-15	**165**	15.1/15.2	**199**	**17.8/19.8**
16-20	**439**	40.2/40.4	**371**	**33.2/37.0**
21-25	**253**	23.1/23.3	**207**	**18.5/20.6**
26-30	94	8.6/8.6	74	6.6/7.4
31-35	55	5.0/5.1	50	4.5/5.0
36-40	34	3.1/3.1	22	2.0/2.2
41-50	17	1.6/1.6	26	2.3/2.6
51 or above	3	0.3/0.3	8	0.7/0.8
Sub-total	1087	99.5/100.0	1003	89.9/100.0
Missing	5	0.5	113	10.1
Total	1092	100.0	1116	100.0

It was noted that the majority of respondents first started their gambling behaviour between the ages of 11 to 25.

i. Duration of gambling (years)

	Caritas		**Tung Wah**	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
0-5	98	9.0/9.0	124	11.1/12.3
6-10	177	16.2/16.3	155	13.9/15.4
11-15	232	21.2/21.3	168	15.1/16.7
16-20	197	18.0/18.1	208	18.6/20.7
21-30	258	23.6/23.7	246	22.0/24.4
31-40	99	9.1/9.1	83	7.4/8.2
41-50	22	2.0/2.0	22	2.0/2.2
51 or over	4	0.4/0.4	1	0.1/0.1
Total	1087	99.5/100.0	1007	90.2/100.0
Missing	5	0.5	109	9.8
Total	1092	100.0	1116	100.0

It should be noted that the majority of respondents have 11 to 30 years' of gambling experience.

j. Amount of debt

	Caritas		Tung Wah	
	Frequency	Percentage/ valid percentage	Frequency	Percentage/ valid percentage
50000 or below	192	17.6/17.9	186	16.7/19.0
500001-100000	186	17.1/17.3	225	20.2/23.0
100001-200000	243	22.3/22.6	202	18.1/20.7
200001-300000	116	10.6/10.8	84	7.5/8.6
300001-400000	81	7.4/7.5	49	4.4/5.0
400001-500000	35	3.2/3.3	38	3.4/3.9
500001-600000	21	1.9/2.0	15	1.3/1.5
600000 or over	81	7.4/7.6	63	5.6/6.4
No debt	118	10.8/11.0	116	10.4/11.9
Sub-total	1073	98.2/100.0	978	87.6/100.0
Missing	19	1.7	138	12.4
Total	1092	100.0	1116	100.0

Around 10% of the total number of respondents has debt of over $500,000.

k. Types of gambling

	Caritas		Tung Wah	
	Frequency	Percentage	Frequency	Percentage
Casino	617	56.5	519	46.5
Horse racing	757	69.3	724	64.9
Football racing	579	53.0	544	48.7
Mahjong	422	38.6	276	24.7
Illegal gambling	78	7.1	Nil	
Financial derivatives	22	2.0	Nil	
Internet gambling	Nil		19	1.7
Others	17	1.6	93	8.3

Attending casinos, horse racings and football racings are the most common types of gambling.

l. General classification of presenting problems

	Caritas		Tung Wah	
	Frequency	Percentage	Frequency	Percentage
Physical illness	270	24.7	40	3.5
Insomnia	466	42.7	134	12.0
Lack of appetite	274	25.1	Nil	
Emotional disturbances (Tung Wah: psychological and emotional disturbances)	854	78.2	790	70.8
Suicidal tendency (self)	168	15.4	208	18.6
Suicidal tendency (die with the whole family)	5	0.5	1	0.1
Familial relationship	622	57.0	617	55.3
Mental health (Tung Wah: emotional and mental illness)	635	58.2	65	5.8
Lack of work motivation	339	31.0	Nil	
Work problem	Nil		170	15.2
Unemployment	Nil		103	9.2
Finance and debt	753	69.0	871	78.0
Bankrupt	74	6.8	31	2.8
Interpersonal relationship	Nil		130	11.6
Accommodation	Nil		26	2.3
Illegal behaviour	Nil		36	3.2
Learning/study	Nil		6	0.5
Others			1	0.1

The two Centres would use different format to classify problems presented by respondents. Emotional disturbances, poor family relationship and debt are

the three most commonly found problems that the gamblers are facing.

m. Help-seeking patterns

	Caritas		Tung Wah	
	Frequency	Percentage	Frequency	Percentage/ valid percentage
Self-reporting	605	55.4	732	65.6/66.5
Referred/forced by family members	380	34.8	247	22.1/22.5
Referred by Disciplinary departments			3	0.3/0.3
Referred by Medical professionals			4	0.4/0.4
Referred by Social Welfare Department			18	1.6/1.6
Referred by Other service units	105	9.6	90	8.1/8.2
Others	2	0.2	6	0.5/0.5
Sub-total	1092	100.0	1100	98.6/100.0
Missing	Nil		16	1.4
Total	1092	100.0	1116	100.0

5.3 Report on Outcome evaluation study

5.3.1 The management and application of service delivery procedures, processes and information outcomes are the keys to future improvements in service delivery and design. This information can be used for decision-making in areas such as client identification, treatment strategies and other factors that account for improvements in service to clients.

Western literature in this area reveals that outcomes of problem gambling counselling services basically involve changing the problem gambler's lifestyle, behaviour, illogical and erroneous beliefs about gambling, and negative emotional

status. Nine key components of successful treatment on gambling were identified as follows (Blaszczynski, Alex, Silove & Derrick, 1995):

a. To avoid the risk of relapse. The problem gambler should avoid exposure to gambling cues and situations as well as involvement with other gamblers.
b. Stress management techniques need to be used to ease arousal and anxiety, and could be used to serve as a more appropriate coping strategy than gambling.
c. If "dysphoric mood" (especially depression) is experienced, antidepressants may need to be prescribed by a physician.
d. Illogical and erroneous beliefs, attitudes, and expectations regarding gambling need to be challenged and corrected with an emphasis placed on preventing relapse.
e. Marriage/family counselling may be needed to re-establish trust between partners/family members.
f. Budgeting skills and acceptance of financial responsibility need to be developed with a concern for meeting financial obligations without gambling.
g. Developing non-gambling leisure activities is essential.
h. If present, addiction to alcohol or other drugs needs to be addressed.
i. Attendance at Gambling Anonymous meetings (gamblers) and GamAnon (spouses) is essential.

5.3.2 Controversies exist in determining the treatment approaches (procedures and processes) that can produce the best outcomes in gambling counselling. Appendix B contains detailed descriptions of the major theories applied to treating problem and pathological gambling.

Although some positive effects have been noted through each of the above treatment modalities, the results are far from conclusive. More replications in controlled studies are needed to secure the empirical basis of gambling treatment. An extensive review of local and western literature indicates that questions on such as the most effective treatment approach, appropriate therapy goals, optimal length of treatment and duration of effects remain unanswered.

The following part of the study will look into the treatment processes involved, client characteristics, counsellors characteristics, and the outcomes of the gambling counselling services provided.

5.3.3 Findings and Analysis

Of the 2,835 service recipients (as of 31 December 2005), 382 consented to participate the study, and of these, 239 (62.6%) could be reached. According to the counsellors, the low return rate could be explained by the fact that clients often come "in a state of crisis". 209 gamblers and 30 significant others receiving services at the two Centres were involved in this study. At Caritas and Tung Wah, 89 gamblers and 13 significant others had successfully terminated the services. Despite our research team's repeated requests to the Centres, only 1 re-opened case and 4 dropout cases were recruited from Tung Wah. None was recruited from Caritas. According to the Centres, "the dropout clients are difficult to reach at". Due to the small number of significant others cases available, the analysis in this project is limited to current and successfully closed cases only.

(I) Outcome evaluation of current cases (level II) receiving services from the two Centres

(i) <u>Descriptive analysis of current gamblers cases</u>

a. 89 clients from Caritas and 120 clients from Tung Wah were interviewed. Results of the analysis showed that there were no significant differences in the characteristics of gamblers receiving services at these two Centres.

b. Basic demographics of gamblers:
   - Over one quarter (29.2%) of gamblers receiving services at Caritas aged between 40-49 whilst at Tung Wah, a similar proportion (31.5%) were aged between 30-39.
   - 87.6% of Caritas clients and 95.0% of Tung Wah clients were male.
   - 75.3% of Caritas clients and 76.9% of Tung Wah clients had finished secondary school education.
   - 55.4% of Caritas clients and 51.3% of Tung Wah clients were married.
   - The unemployment rate among Caritas clients was 1.5% whilst that of Tung Wah was 6.6%.
   - Current average monthly income was HK$16,310.00 (Median = $12,000; S.D. = 22055.79) among Caritas clients (n = 50) and HK$17,692.54 (Median = $12,000; S.D. = 13,936.34) among Tung Wah clients (n = 67).

c. Severity of gambling problem:
   - Interviewees who were receiving counselling services at the two Centres were asked about the severity of their gambling problem over the past month. On a scale of 0-10 (with 10 indicating most severe), the mean self-rating of the Caritas clients on the DSM-IV criteria for pathological gambling was 2.38 (S.D. = 2.74) whilst that of Tung Wah was 2.16 (S.D. = 2.76).
   - Caritas clients gambled on average 2.04 times per month (S.D. = 3.99) and Tung Wah clients 3.58 (S.D. = 5.97).
   - Caritas clients (n = 17) gambled on average HK$8,923.5 (S.D. 23,800.40) per month whilst Tung Wah clients (n = 39) gambled HK$2,589.7 (S.D. = 6,498.00).

d. Concurrent clinical disorders or problems:
   - 10.8% of Caritas clients and 15.8% of Tung Wah clients experienced anxiety.
   - 7.7% of Caritas clients and 11.8% of Tung Wah clients experienced depression.
   - 12.3% of Caritas clients and 17.1% of Tung Wah clients had suicidal tendencies.
   - 7.7% of Caritas clients and 2.6% of Tung Wah clients had a drinking problem.
   - None of the clients from either Centre reported a drug abuse problem.

e. Protective factors:
   - 27.7% of Caritas clients and 21.1% of Tung Wah clients had some form of religious support.
   - On the Relationship Concord Shortened Scale (scored 0-6 with 6 indicating the most positive qualities, Man & Bond, 2005), the mean number of positive qualities in family were 2.40 (S.D. = 1.94) and 2.64 (S.D. = 2.10) for Caritas and Tung Wah clients respectively.
   - On the Relationship Concord Shortened Scale, the mean number of positive qualities in friendship were 0.92 (S.D. = 1.31) and 1.17 (S.D. = 1.42) for Caritas and Tung Wah clients respectively.
   - On the Relationship Concord Shortened Scale, the mean number of positive qualities in work relationship were 0.57 (S.D. =1.07) and 0.59 (S.D. = 1.05) for Caritas and Tung Wah clients respectively.

f. Risk factors:
   - 32.3% of Caritas clients and 39.5% of Tung Wah clients had no close friends.
   - 29.2% of Caritas clients and 28.9% of Tung Wah clients had no hobbies.
   - On the Relationship Concord Shortened Scale (scored 0-6 with 6 indicating the most negative qualities), Caritas and Tung Wah clients recorded 0.71 (S.D. = 1.29) and 1.05 (S.D. = 1.47) respectively mean number of negative qualities in family relationships.
   - On the Relationship Concord Shortened Scale, Caritas and Tung Wah clients recorded 1.11 (S.D. = 1.52) and 1.45 (S.D. = 1.66) respectively mean number of negative qualities in friendship.
   - On the Relationship Concord Shortened Scale, Caritas and Tung Wah clients recorded 1.29 (S.D. = 1.72) and 1.67 (S.D. = 1.47) respectively mean number of negative qualities in work relationships.

(ii) <u>Service expectations</u>

a. In terms of gamblers' reasons for seeking counselling services, there was no significant difference between the two Centres. Their expectations of the services are listed in descending order below. Figures 1 (in Appendix C) shows the detailed description for both Centres.

   - Total abstinence from gambling (90.8%)
   - Control of gambling (75.2%)
   - Resolution of financial crisis (63.8%)
   - Resolution of family problems (62.4%)
   - Resolution of anxiety or mood problems (61.0%)
   - Just having somebody to talk to (53.2%)
   - Resolution of interpersonal problems (50.4%)
   - Resolution of work or employment problems (22.0%)
   - Resolution of physical health problems (17.0%)

b. A majority of p/p clients receiving services at Caritas and Tung Wah expected to achieve total abstinence (89.2% at Caritas and 92.1% at Tung Wah), followed by control of gambling (76.9% at Caritas and 73.7% at Tung Wah). Fewer expected the services to resolve work or employment-related problems (18.5% at Caritas and 25.0% at Tung Wah) or physical health problems (13.8% at Caritas and 19.7% at Tung Wah). More than half of the service recipients expected resolution of financial crisis, family problems, mood

anxiety problems, or interpersonal relationship problems (See table 1). Statistical differences were not found between the two Centres.

Table 1. Service Expectations of Gamblers in Current Study

Service Expectation	Tung Wah (n=76) (%)	Caritas (n=65) (%)
Total abstinence	92.1	89.2
Control gambling	73.7	76.9
Resolve the interpersonal relationship	50.0	50.8
Resolve the financial crisis	69.7	56.9
Resolve the family problems	63.2	61.5
Resolve the health problems	19.7	13.8
Resolve the work or employment problems	25.0	18.5
Resolve the anxiety or mood problems	64.5	56.9
Find somebody to talk	57.9	47.7

(iii)Satisfaction with the counselling process and experience

a. Figures 2-20 (in Appendix C) show the distribution of satisfaction level with the counselling process and experience. Majority (80.2%) of the p/p gamblers receiving services at both Centres were satisfied with their counselling experiences.

b. There was no statistically significant difference in their satisfaction levels with the following counselling processes and experiences (Table 2):
   - Waiting time for first appointment
   - Time of the counselling sessions
   - Frequency of the counselling sessions
   - Intensity of the counselling sessions
   - Counselling experience in general
   - Relationship with counsellors
   - Non-judgmental listening skills of the counsellors
   - Exploring with gamblers as to why they gambled
   - Empathy given by the counsellors
   - Setting of counselling goals with gamblers
   - Accepting gamblers' opinions and making corresponding adjustments
   - Making suitable medical referrals

- Making suitable psychiatric referrals

c. At Tung Wah, the 3 top scoring areas in terms of service satisfaction were:
   - Non-judgmental listening (96.0%)
   - Relationship with counsellors (94.7%)
   - Counselling experience (89.5%)

d. At Tung Wah, the 3 lowest scoring areas in terms of service satisfaction were:
   - Making suitable medical referrals (13.6%)
   - Making suitable psychiatric referrals (8.6%)
   - Waiting time for first appointment (3.9%)

e. At Caritas, the 3 top scoring areas in terms of service satisfaction were:
   - Exploring with gamblers as to why they gambled (93.7%)
   - Setting counselling goals with gamblers (91.8%)
   - Relationship with counsellors (90.8%)

f. At Caritas the 3 lowest scoring areas in terms of service satisfaction were:
   - Counsellors' ability to handle the gambling problem (4.7%)
   - Counsellors' ability to handle the non-gambling problem (3.7%)
   - Accepting gamblers' opinions and making corresponding changes (3.2%)

g. In addition, analysis revealed that the Centres differed statistically significantly in the following service areas (Table 2):
   - Tung Wah service recipients (Mean = 4.51, S.D. = 0.58) had significantly higher rating than Caritas (Mean = 4.19, S.D. = 0.66) on non-judgmental listening, $t = 3.03$, $df = 137$, $p<.01$.

Table 2. Gamblers' Satisfaction with Counselling Process and Services in the Current Study of the Two Centres

	Tung Wah			**Caritas**		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Waiting time to have the first appointment	4.17	0.82	76	4.29	0.66	65
Length of the counselling sessions	4.24	0.71	76	4.06	0.6e4	65
Time of the counselling sessions	4.28	0.70	76	4.20	0.67	65
Frequency of the counselling sessions	3.99	0.66	76	3.97	0.59	65
Intensity of the counselling sessions	3.89	0.67	74	3.92	0.69	65

Non-judgmental listening skills of the counsellors*	4.51	0.58	75	4.19	0.66	64
Empathy given by the counsellors	4.29	0.67	75	4.27	0.60	64
Making suitable medical referrals	3.77	1.19	22	3.58	0.52	12
Making suitable psychiatric referrals	4.00	1.06	35	3.85	0.70	34
Exploring with gamblers why they gambled	4.27	0.73	74	4.30	0.59	63
Setting counselling goals with gamblers	4.18	0.61	73	4.16	0.55	61
Reviewing the counselling progress with gamblers	4.10	0.72	72	4.03	0.58	61
Counsellors' ability to understand the gambling behaviour	3.94	0.75	69	4.09	0.64	64
Counsellors' ability to understand the non-gambling related problems	4.20	0.66	69	4.09	0.73	58
Counsellors' ability to handle the gambling problem	3.99	0.72	68	3.92	0.74	64
Counsellors' ability to handle the non-gambling problem	3.80	0.74	64	3.89	0.72	54
Accepting gamblers' opinion and making corresponding adjustment	4.03	0.70	67	3.90	0.76	63
Counselling experience in general	4.26	0.68	76	4.14	0.70	65
Relationship with counsellors	4.30	0.57	76	4.26	0.62	65

*p<.01

(iv) Counselling outcomes

a. Since most gamblers were evasive about the amount of money gambled and the frequency of their gambling, the research team used the subjective ratings of the gamblers and counsellors as an outcome measurement.

b. The self-rated counselling goals attainments by the p/p gamblers who were receiving gambling counselling services from both Centres were analyzed. Results revealed that p/p gamblers from Caritas and Tung Wah had no statistically significant differences in any of the counselling outcomes (Table 3). No respondents in this study noted that a drug problem had to be addressed during the gambling counselling.

Table 3. Gamblers' Counselling Outcomes in Current Study of the Two Centres

	Tung Wah			Caritas		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Understanding of own gambling behaviour	3.73	0.95	73	3.87	0.78	62
Control gambling	3.76	0.87	74	3.94	0.79	64
Control the desire to gamble	3.63	0.94	73	3.90	0.80	62
Solve the financial problem	3.37	1.17	65	3.54	1.04	56
Solve the family relationship problem	3.43	1.16	61	3.67	0.99	51
Solve the friendship problem	3.21	0.95	42	3.39	0.97	38
Solve the employment or work-related problem	3.44	1.05	36	3.76	0.94	21
Solve the physical health problem	3.49	1.04	35	3.63	1.06	24
Increase the leisure activity to deal with the boredom or loneliness	3.22	1.03	55	3.43	0.93	44
Solve the mood problem	3.54	0.89	65	3.54	0.97	50
Be responsible for own gambling behaviour and consequences	3.79	0.83	66	3.92	0.90	59
Solve the legal problem	3.76	1.00	21	3.45	1.44	11
Solve the alcohol problem	2.80	1.10	5	2.80	0.84	5
Solve the drug problems	/	/	0	/	/	0
Resolve the self-guilt	3.38	0.89	60	3.39	0.91	59
Lower/Eliminate the suicidal tendency	3.88	0.91	34	3.83	0.65	23
Improve the social skills	3.45	0.79	44	3.53	0.86	43
Enhance problem solving skills	3.45	0.68	49	3.44	0.90	52
Improve the drug compliance	3.82	1.40	11	3.60	0.55	5

c. The percentage of problem resolutions partly, largely or totally resolved achieved in both Centres are listed below in descending order:
   - Control of gambling (95.7%)
   - Lowering/Elimination of suicidal tendency (94.7%)
   - Control of the desire to gamble (93.3%)
   - Assuming responsibility for own gambling behaviour and consequences (92.8%)

- Enhancement of problem solving skills (91.1%)
- Improvement of social skills (88.5%)
- Improvement of drug compliance (87.5%)
- Solving mood problems (87.0%)
- Solving employment or work-related problems (86.0%)
- Resolving feelings of self-guilt (84.9%)
- Solving physical health problems (83.1%)
- Solving family relationship problems (82.1%)
- Solving legal problems (81.3%)
- Solving friendship problems (78.8%)
- Solving financial problems (77.7%)
- Increasing leisure activities to deal with boredom or loneliness (76.8%)
- Solving alcohol-related problems (70.0%)

d. Clients receiving services at Caritas suggested that their problems were resolved (partly, largely or totally) in the following descending order : suicidal tendency (100%), drug compliance (100%), understanding of own gambling behaviour (98.4%), control of gambling (98.4%), control of the desire to gamble (98.4%), assuming responsibility for own gambling behaviour and consequences (91.5%), employment or work-related problems (90.5%), problem solving skills (88.5%), social skills (88.4%), physical health problems (87.5%), self-guilt problems (84.7%), family problems (84.3%), mood problems (84.0%), financial problems (82.1%), leisure activity problems (79.5%), friendship problems (78.9%), legal problems (63.6%), and alcohol-related problems (60.0%).

e. Clients receiving services at Tung Wah, suggested that their problems were resolved (partly, largely or totally) in the following descending order : problem solving skills (93.9%), assuming responsibility for own gambling behaviour and consequences (93.9%), control of gambling (93.2%), suicidal tendency (91.2%), legal problems (90.5%), mood problems (89.2%), understanding of own gambling behaviour (89%), control of the desire to gamble (89.0%), social skills (88.6%), self-guilt problems (85%), employment or work-related problems (83.3%), drug compliance (81.8%), family problem (80.3%), alcohol problem (80.0%), physical health problem (80.0%), friendship problems (78.6%), leisure activity problems (74.5%), and financial problems (73.8%).

(v) Counselling outcomes at 6 months follow-up period

a. Forty-one p/p gamblers (17 from Caritas and 24 from Tung Wah) were interviewed at a 6 months follow-up.
b. For the p/p gamblers from Tung Wah, paired sample t-test revealed that the only significant improvement in the self-rating was on "Understanding why they gambled", paired $t = 2.39$, $df = 23$, $p<.05$ (Table 4).

Table 4. Gamblers' Counselling Outcomes (Tung Wah) in Current Study between First Interview and Six-month Follow-up Interview

	First interview			6-month follow-up		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Understanding of own gambling behaviour*	3.63	0.92	24	4.00	0.66	24
Control gambling	3.88	0.80	24	3.79	1.02	24
Control the desire to gamble	3.87	0.87	23	3.74	0.96	23
Solve the financial problem	3.00	1.14	18	3.17	1.38	18
Solve the family relationship problem	3.42	1.17	19	3.42	1.07	19
Solve the friendship problem	3.14	0.95	14	3.43	0.76	14
Solve the employment or work-related problem	3.33	0.52	6	3.83	0.75	6
Solve the physical health problem	4.20	0.45	5	3.40	1.14	5
Increase the leisure activity to deal with the boredom or loneliness	3.29	1.14	14	3.07	1.00	14
Solve the mood problem	3.65	0.88	20	3.55	110	20
Be responsible for own gambling behaviour and consequences	3.68	0.72	22	3.82	0.91	22
Solve the legal problem	3.57	1.13	7	3.71	0.95	7
Solve the alcohol problem	3.00	/	1	3.00	/	1
Solve the drug problems	/	/	0	/	/	0
Resolve the self-guilt	3.53	0.77	19	3.37	0.96	19
Lower/Eliminate the suicidal tendency	4.00	0.93	8	3.50	1.31	8
Improve the social skills	3.60	0.97	10	3.50	0.85	10
Enhance problem solving skills	3.47	0.74	15	3.27	0.88	15
Improve the drug compliance	5.00	/	1	3.00	/	1

*p<.05

c. For the gamblers from Caritas, paired sample t-test revealed that significant improvement of self-rating on the "Friendship problem" was identified at 6-month follow-up, paired t = 3.16, df = 8, p<.01 (Table 5). Again, no significant deterioration of any counselling outcome was found.

Table 5. Gamblers' Counselling Outcomes (Caritas) in Current Study between First Interview and Six-month Follow-up Interview

	First interview			**6-month follow-up**		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Understanding of own gambling behaviour	3.76	0.97	17	3.94	0.83	17
Control gambling	3.65	0.70	17	3.65	1.00	17
Control the desire to gamble	3.71	0.77	17	3.71	0.99	17
Solve the financial problem	3.71	1.16	17	3.59	1.12	17
Solve the family relationship problem	3.56	0.96	16	3.94	1.00	16
Solve the friendship problem*	3.67	0.71	9	4.22	0.67	9
Solve the employment or work-related problem	3.80	1.10	5	4.00	0.71	5
Solve the physical health problem	4.33	0.58	3	4.00	1.00	3
Increase the leisure activity to deal with the boredom or loneliness	3.56	0.88	9	3.56	1.13	9
Solve the mood problem	3.79	0.89	14	3.36	1.22	14
Be responsible for own gambling behaviour and consequences	4.25	0.86	16	4.44	0.51	16
Solve the legal problem	4.00	/	1	2.00	/	1
Solve the alcohol problem	/	/	0	/	/	0
Solve the drug problems	/	/	0	/	/	0
Resolve the self-guilt	3.80	0.94	15	3.93	0.70	15
Lower/Eliminate the suicidal tendency	4.20	0.84	5	4.20	0.45	5
Improve the social skills	3.55	0.52	11	3.82	0.75	11
Enhance problem solving skills	3.56	0.73	9	3.44	0.88	9
Improve the drug compliance	4.00	/	1	2.00	/	1

*p<.01

(II) Outcome Evaluation of closed cases (level II) of the two Centres

(i) Descriptive analysis of gamblers

a. A total of 89 p/p gamblers (37 from Caritas and 52 from Tung Wah) were interviewed. This group had counselling treatment successfully closed on or before 31 January 2005. Results of analysis showed that for the most part the characteristics of gamblers receiving services at the two Centres demonstrated no significant differences. The sole exception was in the self rating of the Relationship Concord Shortened Scale - Negative relationship with colleagues (scored 0-6 with 6 indicating the most negative qualities) (Man & Bond, 2005). Here Caritas service recipients (Mean = 1.00, S.D. =1.17) had a significantly lower rating than Tung Wah (Mean = 1.92, S.D. =1.82), t = 2.56, df = 80, $p<.05$. Yet, caution should be taken in attributing the significant difference to the treatment as no information on the pre-treatment status was available.

b. Basic demographics of gamblers:
   - 32.4% of Caritas clients and 41.2% of Tung Wah clients aged between 40-49.
   - 83.8% of Caritas clients and 90.4% of Tung Wah clients were males.
   - 83.8% of Caritas clients and 78.8% of Tung Wah clients had finished secondary school education.
   - 62.2% of Caritas clients and 59.6% of Tung Wah clients were married.
   - Unemployment rate among clients of Caritas was 8.1% whilst that of Tung Wah was 3.8%.
   - Current average monthly income was HK$10,219.00 (Median = $10.000; S.D. = 7741.02) among clients of Caritas (n=30) and HK$28,782.61 (Median = $10.000; S.D. = 101827.94) among clients of Tung Wah (n=46).

c. Severity of gambling problem:
   - Interviewees who successfully completed the counselling services at the two Centres were asked about the severity of their gambling problem over the past month. On a scale of 0-10 with 10 indicating the most severe gambling problem, the mean self rating of the Caritas clients on the DSM-IV criteria for pathological gambling was 1.15 (S.D. = 1.82) whilst that of Tung Wah was 1.43 (S.D. = 2.45).
   - Caritas clients gambled 1.48 (S.D. = 4.07) times per month and Tung

Wah clients 1.64 (S.D. = 3.32).

- Caritas clients (n = 23) gambled on average HK$478.26 (S.D. 1306.61) per month whilst Tung Wah clients (n= 45) gambled HK$954.67 (S.D. = 2560.19).

d. Concurrent clinical disorders or problems:
   - 12.1% of Caritas clients and 6.1% of Tung Wah clients experienced anxiety.
   - 12.1% of Caritas clients and 6.1% of Tung Wah clients experienced depression.
   - 3.0% of Caritas clients and 12.2% of Tung Wah clients had suicidal tendencies.
   - 6.1% of Caritas clients and 6.1% of Tung Wah clients experienced drink-related problems.
   - None of the clients from either Centre reported a drug abuse problem.

e. Protective factors:
   - 30.3% of Caritas clients and 34.7% of Tung Wah clients had some form of religious support.
   - On the Relationship Concord Shortened Scale (scored 0-6 with 6 indicating the most positive qualities) (Man & Bond, 2005), the mean number of positive family qualities were 3.21 (S.D. = 2.47) for Caritas clients and 3.12 (S.D. = 1.84) for Tung Wah.
   - On the Relationship Concord Shortened Scale, the mean number of positive qualities in friendship were 1.97 (S.D. = 1.96) for Caritas clients and 1.82 (S.D. = 1.78) for Tung Wah.
   - On the Relationship Concord Shortened Scale, the mean number of positive qualities in work relationships were 0.88 (S.D. = 1.24) for Caritas clients and 1.12 (S.D. = 1.64) for Tung Wah.

f. Risk factors:
   - 12.1% of Caritas clients and 22.4% of Tung Wah clients had no close friends.
   - 24.2% of Caritas clients and 20.4% of Tung Wah clients had no hobbies.
   - On the Relationship Concord Shortened Scale (scored 0-6 with 6 indicating the most negative qualities), Caritas and Tung Wah clients recorded 1.03 (S.D. = 1.61) and 0.65 (S.D. = 1.17) respectively mean number of negative family qualities.

- On the Relationship Concord Shortened Scale, Caritas and Tung Wah clients recorded 1.61 (S.D. = 1.52) and 1.67 (S.D. = 1.65) respectively mean number of negative friendship qualities.
- On the Relationship Concord Shortened Scale, Caritas and Tung Wah clients recorded 1.00 (S.D. = 1.17) and 1.92 (S.D. = 1.82) respectively mean number of negative work relationship qualities.

(ii) Expectations on service

a. For those gamblers who had successfully terminated their services, their expectations of the services are listed in descending order. (Table 6). Figure 39 (in Appendix C) shows the detailed description for both Centres.

Table 6. Percentages of Gamblers in Retrospective Study who had the Following Service Expectations

Service Expectation	**Tung Wah (n=40) (%)**	**Caritas (n=25) (%)**
Total abstinence	95.0	76.0
Control gambling	77.5	72.0
Resolve the interpersonal relationship	40.0	44.0
Resolve the financial crisis	67.5	60.0
Resolve the family problems	62.5	64.0
Resolve the health problems	40.0	8.0
Resolve the work or employment problems	32.5	12.0
Resolve the anxiety or mood problems	70.0	48.0
Find somebody to talk	55.0	68.0

b. A majority of p/p gamblers receiving services at both Caritas and Tung Wah expected to achieve total abstinence (76.0% at Caritas and 95.0% at Tung Wah) followed by control of gambling (72.0% at Caritas and 77.5% at Tung Wah). Lower percentages had goals such as finding somebody to talk to (at Caritas 68%) and resolving the anxiety and mood problems (at Tung Wah 70.0%).

c. At Caritas the 3 lowest scoring areas in terms of service demand were resolution of interpersonal problems (44.0%), work or employment related problems (12.0%) and physical health problems (8.0%). At Tung Wah, they

were resolution of interpersonal problems (40.0%), physical health problems (40%) and work or employment related problems (32.5%).

d. More than half of the service recipients expected the services to help them achieve total abstinence (n = 57), control of gambling (n = 49), resolution of financial crisis (n = 42), family problems (n = 41), mood or anxiety problem, (n = 40) and just having somebody to talk to (n = 39).

(iii)Satisfaction about the counselling process and experience

a. Figures 40-58 (in Appendix C) show satisfaction levels of gamblers successfully terminating counselling services. A large majority (72.2%-95.1%) of the p/p gamblers who completed treatment at both Centres were satisfied or very satisfied with their counselling experiences.

b. P/p gamblers from Caritas and Tung Wah demonstrated no statistically significant differences in their satisfaction levels for counselling process and experience (Table 7).

Table 7. Gamblers' Satisfaction with Counselling Process and Experiences in the Retrospective Study of the Two Centres

	Tung Wah			**Caritas**		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Waiting time to have the first appointment	4.04	0.89	49	4.39	0.75	33
Length of the counselling sessions	4.1	0.71	49	4.27	0.63	33
Time of the counselling sessions	4.16	0.83	49	4.27	0.72	33
Frequency of the counselling sessions	3.86	0.87	49	4.12	0.60	33
Intensity of the counselling sessions	3.9	0.83	48	3.94	0.66	33
Non-judgmental listening skills of the counsellors	4.31	0.65	49	4.31	0.54	32
Empathy given by the counsellors	4.34	0. 64	47	4.27	0.57	33
Making suitable medical referrals	4.07	0.88	15	4.22	0.67	9
Making suitable psychiatric referrals	3.96	0.83	23	4.13	0.81	16
Exploring with gamblers why they gambled	4.37	0.64	49	4.21	0.55	33
Setting counselling goals with gamblers	4.16	0.87	49	4.3	0.59	33
Reviewing the counselling progress with gamblers	4.16	0.72	49	4.16	0.73	32

Counsellors' ability to understand the gambling behaviour	4.26	0.68	47	4.22	0.61	32
Counsellors' ability to understand the non-gambling related problems	3.89	0.71	36	4.13	0.55	23
Counsellors' ability to handle the gambling problem	3.91	0.72	47	4.13	0.72	31
Counsellors' ability to handle the non-gambling problem	3.75	0.72	32	3.86	0.56	22
Accepting gamblers' opinion and making corresponding adjustment	4.07	0.68	42	4.04	0.64	23
Counselling experience in general	4.18	0.81	49	4.31	0.64	32
Relationship with counsellors	4.23	0.75	48	4.42	0.56	33

c. Satisfaction levels of gamblers successfully terminating counselling services are listed in descending order:
   - Exploring with gamblers as to why they gambled (95.1%)
   - Non-judgmental listening skills of the counsellors (92.6%)
   - Empathy given by the counsellors (92.5%)
   - Relationship with counsellors (90.1%)
   - Reviewing the counselling progress with other gamblers (90.1%)
   - Ability to understand gambling behaviour (88.6%)
   - Length of the counselling sessions (88.6%)
   - Setting of counselling goals with gamblers (87.8%)
   - Counselling experience in general (87.7%)
   - Making suitable medical referrals (83.3%)
   - Time/Day of the counselling sessions (82.9%)
   - Accepting gamblers' opinions and making corresponding adjustments (81.5%)
   - Frequency of the counselling sessions (80.5%)
   - Waiting time for first appointment (80.5%)
   - Ability to handle gambling problems (79.5%)
   - Ability to understand non-gambling problems (78.0%)
   - Intensity of the counselling sessions (77.8%)
   - Making suitable psychiatric referrals (74.4%)

d. At Tung Wah, the 3 top scoring areas in terms of service satisfaction were:
   - **Exploring with gamblers as to why they gambled (95.9%)**
   - **Reviewing the counselling progress with other gamblers (91.8%)**

- **Empathy given by the counsellors (91.5%)**

e. At Tung Wah, the 3 lowest scoring areas in terms of service satisfaction were:

- **Frequency of the counselling sessions (10.2%)**
- **Intensity of the counselling sessions (6.3%)**
- **Making suitable psychiatric referrals (4.3%)**

f. At Caritas, the 3 top scoring areas in terms of service satisfaction were:

- **Relationship with counsellors (97.0%)**
- **Non-judgmental listening skills of the counsellors (96.9%)**
- **Exploring with gamblers as to why they gambled (93.9%)**

  Setting counselling goals with gamblers (93.9%)

  Empathy given by the counsellors (93.9%)

g. At Caritas the 3 lowest scoring areas in terms of service satisfaction were:

- **Counsellors' ability to understand non-gambling difficulties (12.5%)**
- **Counsellors' ability to handle gambling problem (3.2%)**
- **Review of counselling progress with gamblers (3.1%)**

(iv) Counselling outcomes

The self-rated counselling goal attainments by p/p gamblers successfully terminating services from both Centres were analyzed. Results revealed that there was no statistically significant difference in counselling outcomes between p/p gamblers from Caritas and Tung Wah (Table 8).

Table 8. Gamblers' Counselling Outcomes in Retrospective Study of the Two Centres

	Tung Wah			**Caritas**		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Understanding of own gambling behaviour	3.92	0.92	48	4.13	0.75	32
Control gambling	4.04	0.85	48	4.21	0.78	33
Control the desire to gamble	4.00	0.83	48	4.09	0.84	33
Solve the financial problem	3.46	0.93	41	3.79	1.11	29
Solve the family relationship problem	3.75	1.15	40	3.71	0.94	28
Solve the friendship problem	3.71	1.18	28	3.93	0.96	15
Solve the employment or work-related problem	4.21	1.27	19	4.40	0.83	15
Solve the physical health problem	4.00	1.16	28	3.64	0.92	11

Increase the leisure activity to deal with the boredom or loneliness	3.57	1.24	35	3.84	0.90	19
Solve the mood problem	3.83	0.94	36	4.05	1.02	21
Be responsible for own gambling behaviour and consequences	4.02	0.94	43	4.15	0.82	27
Solve the legal problem	3.44	1.01	9	4.20	0.79	10
Solve the alcohol problem	3.20	1.10	5	4.00	1.41	2
Solve the drug problems	5.00	/	1	5.00	/	1
Resolve the self-guilt	3.45	0.86	38	3.57	0.96	28
Lower/Eliminate the suicidal tendency	3.69	1.01	16	4.57	0.54	7
Improve the social skills	3.46	0.79	28	3.81	0.75	16
Enhance problem solving skills	3.64	0.64	36	3.68	0.82	19
Improve the drug compliance	4.11	0.93	9	4.25	0.96	4

The percentage of problem resolutions partly, largely or totally resolved achieved in both Centres are listed below in descending order:

- Improvement of drug compliance (100%)
- Solving drug problem (100%)
- Enhancement of problem solving skills (98.2%)
- Solving employment or work-related problems (97.0%)
- Control of gambling (96.3%)
- Control of the desire to gamble (96.3%)
- Understanding why they gambled (95.0%)
- Assuming responsibility for own gambling behaviour and consequences (94.3%)
- Improvement of social skills (93.2%)
- Solving mood problems (93.0%)
- Managing suicidal tendencies (91.3%)
- Solving family relationship problems (91.0%)
- Solving friendship problems (90.5%)
- Solving legal problems (89.5%)
- Solving physical health problems (89.5%)
- Resolving feelings of self-guilt (89.4%)
- Solving financial problems (87.1%)
- Solving alcohol-related problems (85.7%)
- Solving leisure activity problems (dealing with boredom or loneliness) (84.9%)

a. Caritas clients successfully terminating gambling counselling services suggested that their problems were resolved partly, largely or totally in the following descending order: suicidal tendencies (100%), social skills (100%), legal problems (100%), drug-related problems (100%), alcohol-related problems (100%), employment or work-related problems (100%), drug compliance (100%), control of gambling (97.0%), understanding of own gambling behaviour (96.9%), assuming responsibility for own gambling behaviour and consequences (96.3%), mood problems (95.2%), leisure activity problems (94.7%), problem solving skills (94.7%), control of the desire to gamble (93.9%), physical health problems (90.9%), family problems (89.3%), friendship problems (86.7%), self-guilt problems (85.7%), and financial problems (82.8%).

b. Tung Wah clients successfully terminating services suggested that their problems were resolved partly, largely or totally in the following descending order: problem solving skills (100%), drug compliance (100%), drug-related problems (100%), control of the desire to gamble (97.9%), control of gambling (95.8%), employment or work-related problems (94.4%), understanding of own gambling behaviour (93.8%), assuming responsibility for own gambling behaviour and consequences (93.0%), friendship problems (92.6%), family problems (92.3%), self-guilt problems (92.1%), mood problems (91.7%), financial problems (90.2%), social skills (89.3%), physical health problems (88.9%), suicidal tendencies (87.5%), alcohol-related problems (80.0%), leisure activity problems (79.4%), and legal problems (77.8%) (Figures 59-77 in Appendix C).

(v) Counselling outcomes at 6 months follow-up period

a. Thirty gamblers (14 from Caritas and 16 from Tung Wah) were interviewed at a 6-months follow-up.
b. Improvements were observed on Caritas clients in the following areas (Table 9). No significant deterioration of any counselling outcomes was identified.

1. Understanding why they gambled
2. Controlling the desire to gamble
3. Financial problems
4. Leisure activity problems
5. Assuming responsibility for own gambling behaviour and consequences

6. Self-guilt
7. Social skills
8. Problem solving skills

Table 9. Gamblers' Counselling Outcomes (Caritas) in Retrospective Study between First Interview and Six-month Follow-up Interview

	First interview			6-month follow-up		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Understanding of own gambling behaviour	4.18	0.87	11	5.00	0.00	11
Control gambling	4.50	0.52	12	4.75	0.87	12
Control the desire to gamble	4.17	0.84	12	5.00	0.00	12
Solve the financial problem	3.50	0.93	8	4.63	1.06	8
Solve the family relationship problem	4.11	0.60	9	4.22	1.56	9
Solve the friendship problem	3.80	1.10	5	4.40	1.34	5
Solve the employment or work-related problem	4.00	1.16	4	5.00	0.00	4
Solve the physical health problem	3.67	1.16	3	5.00	0.00	3
Increase the leisure activity to deal with the boredom or loneliness	3.83	0.98	6	4.50	1.23	6
Solve the mood problem	4.57	0.54	7	4.57	1.13	7
Be responsible for own gambling behaviour and consequences	3.88	0.99	8	5.00	0.00	8
Solve the legal problem	4.00	/	1	2.00	/	1
Solve the alcohol problem	/	/	0	/	/	0
Solve the drug problems	/	/	0	/	/	0
Resolve the self-guilt	3.50	0.97	10	4.40	1.27	10
Lower/Eliminate the suicidal tendency	/	/	0	/	/	0
Improve the social skills	4.17	0.41	6	5.00	0.00	6
Enhance problem solving skills	3.75	0.50	4	5.00	0.00	4
Improve the drug compliance	/	/	0	/	/	0

c. Analysis of the corresponding data on Tung Wah clients revealed that the following counselling outcomes showed improvements (Table 10). There was no significant deterioration of any counselling outcomes.

1. Understand why they gambled
2. Control gambling
3. Control the desire to gamble

4. Financial problems
5. Mood problems
6. Assuming responsibility for own gambling behaviour and consequences
7. Self-guilt
8. Social skills
9. Problem solving skills

Table 10. Gamblers' Counselling Outcomes (Tung Wah) in Retrospective Study between First Interview and Six-month Follow-up Interview

	First interview			**6-month follow-up**		
	Mean	**S.D.**	**(n)**	**Mean**	**S.D.**	**(n)**
Understanding of own gambling behaviour	3.94	1.00	16	5.00	0.00	16
Control gambling	4.20	0.56	15	5.00	0.00	15
Control the desire to gamble	4.25	0.78	16	5.00	0.00	16
Solve the financial problem	3.20	0.63	10	5.00	0.00	10
Solve the family relationship problem	4.09	1.64	11	5.00	0.00	11
Solve the friendship problem	4.33	1.86	6	5.00	0.00	6
Solve the employment or work-related problem	5.40	1.52	5	5.00	0.00	5
Solve the physical health problem	4.71	1.60	7	4.57	1.14	7
Increase the leisure activity to deal with the boredom or loneliness	4.29	1.80	7	5.00	0.00	7
Solve the mood problem	4.22	0.67	9	5.00	0.00	9
Be responsible for own gambling behaviour and consequences	4.46	0.78	13	5.00	0.00	13
Solve the legal problem	3.50	0.71	2	5.00	0.00	2
Solve the alcohol problem	/	/	0	/	/	0
Solve the drug problems	/	/	0	/	/	0
Resolve the self-guilt	3.90	0.74	10	4.70	0.95	10
Lower/Eliminate the suicidal tendency	4.50	0.71	2	5.00	0.00	2
Improve the social skills	3.83	0.75	6	5.00	0.00	6
Enhance problem solving skills	4.00	0.76	8	5.00	0.00	8
Improve the drug compliance	5.00	/	1	5.00	/	1

(III)Counsellors' study

(i) Twenty counsellors submitted full documentation of current and successfully closed gamblers' cases. Nine counsellors (45.0%) were male, fifteen (75.0%) were qualified as certified gambling counsellors, 95.0% were qualified as

social workers/counsellors, and 5.0% as clinical psychologists. Of the 12 counsellors reported academic qualifications, a majority (83.3%) had a Master's degree in Counselling. The average length of counselling experience was 71.88 months (S.D. = 71.43; Median = 49.25) whilst the average counselling experience with gamblers was 28.13 months (S.D. = 34.66; Median = 18.00). The average number of gambling cases handled was 101.65 (S.D. = 71.08; Median = 100.00) and the average number of treatment groups conducted was 2.95 (S.D. = 1.64; Median = 3.00).

(ii) Theoretical orientations in Individual Treatment

a. Counsellors working at Caritas used seven theoretical orientations in the individual treatment of gamblers including: cognitive behavioural therapy (87.5%), family therapy (75.0%), solution-focused therapy (50.0%), client-centered therapy (37.5%), motivational interviewing (12.5%), narrative therapy (12.5%), and psychoanalytic approach (12.5%).

b. Counsellors working at Tung Wah used eight theoretical orientations in their work including: cognitive behavioural therapy (83.3%), family therapy (50.0%), motivational interviewing (50.0%), client-centered therapy (8.3%), cognitive therapy (8.3%), hypnotherapy (8.3%), solution-focused therapy (8.3%), and narrative therapy (8.3%).

c. Consistent with the literature, cognitive behavioural therapy and family therapy were the most popular theoretical orientations for the counsellors of both Centres. Other theoretical orientations were listed under table 11.

Table 11. Theoretical Orientations Employed by Counsellors of Caritas and Tung Wah

Theoretical Orientations	Tung Wah (n=12) (%)	Caritas (n=8) (%)
Family therapy	50.0	75.0
Cognitive behavioural therapy	83.3	87.5
Solution Focus Therapy	8.3	50.0
Motivational Interviewing	50.0	12.5
Narrative Therapy	8.3	12.5
Psychoanalytic Approach	0.0	12.5
Systemic Perspective	50.0	12.5
Cognitive therapy	8.3	0.0
Hypnotherapy	8.3	0.0
Client-centered therapy	8.3	37.5

(iv) Counsellors tasks analysis

a. *Counsellor task analysis* (CTA-PG) aims to provide a broad overview of the complexity of the counsellor's role, specifying the range of tasks they perform, and documenting the relationship between the frequency of task performance and counsellors' beliefs about the importance of the tasks performed. Counsellors, using a five-point scale, rated "how often" they performed each task. This instrument was used as part of an evaluation of the Breakeven Problem Gambling Counselling Service in Victoria, Australia. 106 task statements thematically grouped into 9 clusters provide a detailed description of the treatment elements of the gambling counselling:

1. Assessment
    a. Assessment of other addiction (the Cronbach's alpha value of the subscale (α) =.85),
    b. Client eligibility (α =.80) ,
    c. Client risk (α =.74) and
    d. Problem impact (α = .53),
2. Treatment goals (α =.65),
3. General interventions
    a. Facilitating effective client interventions (α =.67)
    b. Establishing rapport (α =.63),
4. Gambling interventions

a. Teaching cognitive behavioural strategies (α =.92),
b. Controlling gambling (α =.81),
c. Maintaining treatment goals (α =.62)
d. Increasing awareness of non-gambling options (α =.57),

5. Family interventions
   a. Improving family relationships (α =.81)
   b. Enhancing partner responses to gambling (α =.67),
6. Interventions for related problems
   a. Financial issues (α =.84),
   b. Processes in resolving gamblers' problem (α =.67),
7. Referral
   a. Linking clients with appropriate services (α =.72)
   b. Referral to medical practitioners (α =.63),
8. Education
   a. Community education and Service promotion (α =.85)
   b. Financial counselling education (α =.59)
9. Research/policy development (α =.81).

Two items ("Attend financial counselling induction training and regular in-service training with the Financial and Consumer Rights Council" and "Respond to request or inquiries from the community regarding the Financial Counselling Program") that were irrelevant to the local setting were eliminated from the original subscale of financial counselling education under the Cluster Education. The overall internal consistency of the scale was considered satisfactory, of which the Cronbach's alpha value (α) is .60 (Jackson et al., 2000).

Counsellor Task Analysis can only serve as a reference for the job tasks of problem gambling counsellors. The frequency rated by the counsellor in the study of Jackson et al. (2000) should not be viewed as an absolute benchmark. Table 12 showed the frequency rated by the counsellors in Hong Kong and Australia (Jackson et al., 2002).

b. Consistent with the findings of Jackson et al (2000), Caritas and Tung Wah counsellors reported to have performed the following tasks "occasionally" to "seldom":
   5b. Enhancing partner responses to gambling
   6a. Financial issues

6b. Processes in resolving gambling problems
7a. Referral and linking clients with appropriate services
7b. Referral to medical practitioners
8a. Community education and service promotions
8b. Financial counselling education
9. Research and policy development

Caritas counsellors and those in the study of Jackson et al (2000) reported to have the following tasks "occasionally" to "seldom" performed whilst Tung Wah counsellors reported carrying out these tasks "frequently" or "almost always":
1a. Assessment of other addictions
1d. Assessment of problem impacts
3a. Facilitating effective client intervention

Similar to the findings in Jackson et al. (2000), both Caritas and Tung Wah counsellors reported carrying out these tasks "frequently" or "almost always":
1b. Assessment of client eligibility
1c. Assessment of client risk scale
2. Treatment goals
3b. Establishing rapport
4a. Teaching Cognitive Behaviour Therapy
4b. Controlling gambling
4c. Maintaining treatment goals
4d. Increasing awareness of non-gambling treatment options
5a. Improving family relationships

Table 12. Counsellor Task Analysis (Problem Gambling) Instrument

CTA(PG) Subscales	**Tung Wah**		**Caritas**		**Jackson et al, 2000 (Australia)**	
	Mean	**S.D.**	**Mean**	**S.D.**	**Mean**	**S.D.**
Assessment of other addictions	3.71	1.02	2.90	0.53	*3.22*	*0.72*
Assessment of client eligibility	4.17	1.04	3.93	0.43	*3.79*	*0.77*
Assessment of client risk scale	4.38	1.09	4.16	0.50	*4.54*	*0.49*
Assessment of problem impact	4.22	0.73	3.38	0.60	*3.39*	*1.33*
Treatment goals	4.52	0.96	4.53	0.26	*4.4*	*0.44*

Facilitating effective client intervention	3.56	0.87	3.90	0.43	*3.36*	*0.62*
Establishing rapport	4.28	0.74	4.20	0.30	*4.11*	*0.42*
Teaching CBT	3.69	1.03	3.68	0.44	*3.59*	*0.72*
Controlling gambling	3.88	1.01	4.10	0.49	*3.68*	*0.73*
Maintaining treatment goals	3.39	1.02	3.17	0.44	*3.79*	*0.79*
Increasing awareness of non-gambling treatment options	3.42	1.01	3.29	0.42	*2.68*	*0.74*
Improving family relationship	3.75	1.12	3.85	0.52	*3.45*	*0.74*
Enhancing partner responses to gambling	3.57	1.02	3.80	0.35	*2.95*	*0.75*
Financial issue	3.67	0.98	3.71	0.40	*1.92*	*0.69*
Processes in resolving gambling problem	2.69	0.89	2.80	0.62	*2.64*	*1.15*
Referral and linking clients with appropriate service	2.95	0.92	2.83	0.82	*3.06*	*0.6*
Referral to medical practitioner	2.75	1.12	1.81	1.00	*3.23*	*0.71*
Community education and service promotion	2.89	0.85	2.75	0.61	*2.40*	*0.68*
Financial counselling education	2.50	1.00	2.13	1.13	*2.25*	*0.67*
Research and policy development	2.53	0.94	2.29	0.90	*2.82*	*0.76*

(IV)Integrative Views on Service Provision

(i) Outcomes and clients' characteristics

a. The gamblers' characteristics listed in the above demographics section were considered potential predictors of treatment outcomes: percentage of problems resolved partly, largely and totally of the 19 areas mentioned in the counselling outcomes section was recorded. Separate stepwise discriminant analyses were conducted to explore the association between the outcomes and clients' characteristics.

b. Findings of the above analysis revealed that positive qualities relating to family, friendship and work relationships predicted the percentage of problems resolved. Negative qualities for the same indices predicted lack of resolution.

Examples of positive qualities include having heart-to-heart talks and/or unspoken connection with family, friends and colleagues. Examples of negative qualities include experience of conflicts and/or not talking the same language.

Table13. Regression Analyses Regressing Client Characteristics on Percentage of Problem Resolution

Outcome measure	Client characteristics	B	P	Adj R^2
Percentage of problems resolved partly, largely and totally	Constant	81.26	.000***	.06
	Positive quality of the family, friend and work relationship	1.54	.002**	
	Constant	91.17	.000***	.02
	Negative quality of the family, friend and work relationship	-9.58	.039*	

*p<.05, **p<.01, ***p<.001

(ii) Outcomes and intervention characteristics

a. Counsellors were invited to provide information about intervention characteristics on an individual case basis, including treatment orientations, treatment goals, counselling tasks to achieve these goals, duration of service, number of individual, and group and family sessions. Such information would be considered as potential predictors of treatment outcomes: percentage of problems resolved partly, largely and totally among the 19 areas mentioned in the counselling outcomes section was recorded. Separate stepwise discriminant analyses were conducted to explore the association between the outcomes and intervention characteristics.

b. Findings revealed that the only factor predicting the percentage of problems resolved was the total number of treatment approaches applied in case management. No single treatment orientation was demonstrated to achieve problem resolution. Rather, an eclectic approach in treating the local

gamblers was proved to be more effective.

Table14. Regression Analyses Regressing Treatment Characteristics on Percentage of Problem Resolution

Outcome measure	Treatment characteristics	B	P	Adj R^2
Percentage of problems resolved partly, largely and totally	Constant	72.32	.000***	.11
	Total no of treatment approaches employed	3.41	.000***	

*p<.05, **p<.01, ***p<.001

(iii)Outcomes and the counselling process

a. The gamblers' satisfactions with the various counselling processes listed in the above service satisfaction section were considered potential predictors of the treatment outcomes: percentage of problems resolved partly, largely and totally among the 19 areas mentioned in the service satisfaction section was recorded. Separate stepwise discriminant analyses were conducted to explore the association between the outcomes and counselling process.

b. Findings revealed that the only factor predicting the percentage of problems resolved was the total number of treatment approaches applied in case management.

c. The percentage of problems resolved was positively predicted by clients' satisfaction level with the counsellors' ability to understand their gambling behaviour, handle their gambling and non-gambling related problems, non-judgmental listening skills, empathy, relationship with counsellor, and counselling experience in general. Gamblers who registered higher satisfaction on these aspects of the counselling experience demonstrated a higher level on problem resolution.

Table15. Regression Analyses Regressing Counselling Process on Percentage of Problem Resolution

Outcome measure	Counselling process	B	P	Adj R^2
Percentage of problems resolved partly, largely and totally	Constant	53.98	.000***	.05
	Non-judgmental listening	7.70	.005**	
	Constant	38.256	.001**	.12
	Empathy	11.49	.000***	
	Constant	38.28	.002**	.10
	Relationship with Counsellors	11.52	.000***	
	Constant	30.44	.003**	.18
	Counselling experience	13.55	.000**	
	Constant	51.50	.000***	.08
	Ability to understand your gambling problems	9.01	.000***	
	Constant	51.40	.000***	.12
	Ability to handle your gambling problems	9.46	.000***	
	Constant	61.58	.000***	.07
	Ability to handle your non-gambling problems	7.12	.003**	

*p<.05, **p<.01, ***p<.001

5.3.4 Group Work for Gamblers and Family Members

The two counselling centres employed various group work modalities to help gamblers and their family members. All group activities held between September 2004 and December 2005 were included in this analysis. A total of 8 group worker feedback forms were collected from Caritas, and 10 from Tung Wah.

The group worker feedback form was divided into four sections. Section one collects information about the group which included the: nature of the group, total number of sessions, duration of each session, intensity of the session, number of participants, nature of participants and attendance. Section two requests the counsellor(s) involved to describe the theoretical orientation(s) used. Section three documents the group treatment goal(s). The counsellor will also rate the level of attainment of the group treatment goal and explain what has been done to enable the group moving towards this goal. Section four documents the treatment outcomes. Counsellors are requested to provide the result of formal assessment of group counselling outcomes and substantiate it with evidence. They should also explain the factors contributing to successful outcomes and identify factors that might hinder the achievement of the outcomes of the group. (Appendix I: Group Worker Feedback Form)

a. Nature of groups

At Caritas, there were three treatment groups run by counsellors (one for gamblers and two for gamblers and their spouses), two mutual support groups for gamblers run by a team of three/four counsellors, and three psycho-education and developmental groups run by different counsellors (one for gamblers and two for family members).

At Tung Wah, there were four treatment groups run by the same counsellor (all for gamblers applying the same protocol), two mutual support groups for gamblers run by the same counsellor, three psycho-education and developmental groups run by different counsellors (one for gamblers and two for family members), and one psycho-education and training group to train recovered gamblers to become peer counsellors, which was still on-going as at December, 2005.

The number of sessions, duration of each session, intensity of session, number of participants and attendance are presented in the following table 16 and table 17.

Table 16: Caritas Group Work Profiles

Nature of group	No. of session	Duration	Intensity	No. of participants	Attendance N, (%)
1. Treatment group for gamblers	10	2hr	Once every other week	12	4 (100%) 5 (80-99%) 2 (60-79%) 1 (20-39%)
2. Treatment group for couples A	12	2hr	Once every other week	From 14 -24	Open group attendance not available
3. Treatment group for couples B	8	1.5 hr	Once every other week	10	5 (100%) 3 (80-99%) 2 (0-19%)
4. Mutual support group A	1st to 55th	2hr	Once every other week 17.12.03 to 22.9.04	Average 24	Open group attendance average 24
5.Mutual support group B	56th to 80th 81st to 98th	2 hr 1.25 hr	Once/ week since 6.10.04	Average 32	Open group attendance average 32
6. Psychoeducation Group for gamblers	8	2hr	Once every other week	37	Open group attendance not available

7. Psychoeducation Group A for family members	4	2hr	Once/ week	19	Open group attendance not available
8. Psychoeducation Group B for family members	4	2hr	Once/ week	18	7 (100%) 3 (80-99%) 2 (60-79%) 6 (20-39%)

Table 17: Tung Wah Group Work Profiles

Nature of group	No. of session	Duration	Intensity	No. of participants	Attendance N, (%)
1. Treatment group for gamblers A	10	3 hr	Once/ week	11	3 (100%) 4 (80-99%) 1 (60-79%) 2 (40-59%) 1 (20-39%)
2. Treatment group for gamblers B	10	3 hr	Once/ week	8	3 (100%) 3 (80-99%) 1 (60-79%) 1 (40-59%)
3. Treatment group for gamblers C	10	3 hr	Once/ week	8	3 (100%) 3 (80-99%) 1 (60-79%) 1 (40-59%)
4. Treatment group for gamblers D	10	3 hr	Once/ week	8	2 (100%) 4 (80-99%) 2 (20-39%)

5. Mutual support group A	15	2hr	Once/ week	18	0 (100%) 3 (80-99%) 5 (60-79%) 5 (40-59%) 3 (20-39%) 2 (0-19%)
6. Mutual support group B	12	2 hr	Once/ week	23	0 (100%) 5 (80-99%) 4 (60-79%) 4 (40-59%) 3 (20-39%) 7 (0-19%)
7. Psychoeducation Group for gamblers	4	1.5 hr	Once/ week	3	1 (100%) 1 (80-99%) 1 (20-39%)
8. Psychoeducation Group A for female family members	10	3 hr	Once/ week	7	2 (100%) 3 (80-99%) 2 (60-79%)
9. Psychoeducation Group B for family members	4	1.5 hr	Once/ week	3	2 (100%) 1 (20-39%)
10. Psychoeducation and training group for peer counsellors	25	2 hr	Once/ week	7	90.1% Group not yet completed

b. Theoretical orientations of group treatment

The theoretical orientations adopted for the group counselling practice were compiled and tabled. In summary Tung Wah counsellors adopted a predominantly cognitive behavioural therapy for the four treatment groups (as indicated clearly in the ten group session plans) whilst Caritas counsellors used neuro-linguistic as well as cognitive behavioural therapy. Other than running treatment groups for gamblers, Caritas also organized two treatment groups for gamblers and their spouses. One was an open group whilst the other a closed group. Each group was led by a male and a female counsellor, but employing different theoretical orientations.

The objectives of the mutual support groups for the two Centres were to share best practice and to build trust. Areas discussed included maintaining abstinence by sharing successful management of gambling urges, difficulties involved and effective management skills, relapse prevention strategies, and facilitation of expression of emotions, and building up a support network. Since the mutual support groups are long-term open groups with a large membership, counsellors from both Centres have to be very sensitive to the different demands of the members and to employ a variety of theoretical approaches to meet their needs.

Educational groups for gamblers were organized by the two Centres using various approaches. Whilst Caritas employed a predominantly cognitive behavioural therapy and neuro-linguistic approach, Tung Wah chose the psycho-educational approach and applied the motivational interviewing model.

As family members are often the initial point of contact in seeking help, there is a ready need to explain to them the nature of the gambling problem, the characteristics of gamblers, the stages of change, and effective ways to support gamblers. Both Centres organized educational groups for family members, usually adopting a psycho-educational approach, with ex-gamblers sharing their experiences with current clients' family members. Various approaches would be applied. For example a body-mind-spiritual model was applied with one group of female family members to facilitate better management of stress and emotions.

Another approach was peer support, which had been identified as important in helping control gambling. Tung Wah recruited 7 recovered gamblers to be trained as peer counsellors. The theoretical orientation adopted here was experiential learning and skills training.

Table 18 : Caritas Theoretical Orientation of Group Work

Nature of group	**Theoretical Orientation**
1.Treatment group for gamblers	Neuro-linguistic, cognitive behavioural therapy
2.Treatment group for couples A	Family therapy, couple therapy
3.Treatment group for couples B	Family system theory, learning theory, client-centered therapy
4.Mutual support group A	Learning therapy, cognitive behavioural therapy, family therapy, gamblers anonymous model
5.Mutual support group B	Learning therapy, cognitive behavioural therapy, family therapy, gamblers anonymous model
6.Psychoeducation group for gamblers	Neuro-linguistic, cognitive behavioural therapy
7.Psychoeducation group A for family members	Cognitive and educational
8.Psychoeducation group B for family members	Educational approach

Table 19 : Tung Wah Theoretical Orientation of Group Work

Nature of Group	**Theoretical Orientation**
1.Treatment group for gamblers A	Cognitive-behavioural therapy, bio-psycho-social model
2.Treatment group for gamblers B	Same
3.Treatment group for gamblers C	Same
4.Treatment group for gamblers D	Same
5.Mutual support group A (15 sessions)	Bio-psycho-social and systemic approach, motivational interviewing, model of change, cognitive behavioural therapy, behavioural modification, hypnotherapy, different family therapy models such as structural, strategic, Stair, solution focused family therapy are applied.
6.Mutual support group B (12 sessions)	Same as above group 5
7.Psychoeducation Group for gamblers	Psycho-education, motivational interviewing
8.Psychoeducation & developmental group A for female family members	Body-mind-spiritual model, emotions management, stress management,
9.Psychoeducation group B for family members	Educational, information giving, modeling
10.Psychoeducation and peer counsellor training group	Peer counselling training, experiential learning and skills training

c. Outcome Measurement of Group Counselling

Due to the complex needs of gamblers and their family members, the two Centres tried their best to design different group programmes to satisfy their demands. As gamblers tended to lead a crisis-ridden life and many of them had irregular working patterns, it was not easy for them to commit to a group process. This explained why there was only small number of participants in some groups.

The two Centres organized different kinds of groups with varying numbers of sessions, of various lengths and intensities, different theoretical orientations, varying contents, and to be run by different counsellors. All these factors meant that it was not possible to do an evaluation of the group programme in a scientific way. On top of that, since the two Centres had only started the service in October 2003, the counsellors were still in an exploratory stage in answering the question of who needs what and when and how and why. It was understandable that standardized group treatment components/models were being developed and tried out. It is however strongly recommended that counsellors document their experiences and accumulate wisdom from practice to answer the question of who can benefit from what kind of group treatment, with what kind of group process and to achieve what kind of outcomes.

It is recognized that Tung Wah planned and organized treatment groups using the cognitive behavioural approach in a very systematic way, with clear group protocol. The objectives and contents of the treatment groups were well-defined and designed. Pre and post measures were built in for evaluation purposes, showing very positive treatment outcomes in terms of goal attainment, positive cognitive change and sense of efficacy to control gambling or remain abstinent. While the treatment outcome was very positive in terms of changing erroneous beliefs about gambling for the 75.0% of the participants who had very good attendance, it was noted that about 10.0% to 20.0% of participants tended to drop out, even though the members had been screened for possessing good prognostic factors (such as employment, working ability, supportive social network etc). The drop out rate was comparable to other similar treatment groups using the cognitive behavioural approach. This implied that there is no one-size-fits-all treatment approach suitable for everyone. Therefore, it was encouraging to

see counsellors trying out different approaches.

Although some positive effects have been noted from each of the above treatment modalities in both Centres, the results are far from conclusive. More replications in controlled studies are needed to secure the empirical basis in the study of the effectiveness of group gambling treatment. As mentioned previously and here stressed again, the number of groups was small and every group was unique in its theoretical approach, the number of sessions given and their intensity. It is therefore very difficult to make any meaningful comparisons. Moreover, it is not ethical to put clients in a randomized control group without receiving treatment. The randomized control group design for research purposes seems therefore quite impossible. In future, it is strongly recommended that both Centres document their input, processes and outcomes more clearly so that one can better answer the question of which approach, with what kinds of input, for what types of participants, will achieve the best outcome.

5.3.5 About "Best Practice" and Other Observations

a. The "Best Practice Model": Issues and Observations

- Consistent with the literature review, the local counsellors view cognitive behavioural therapy as promising in identifying and changing illogical and erroneous beliefs about gambling.

- They noted that a systemic approach is good for assessment of gamblers while a multi-disciplinary approach with psychiatric and clinical psychological support was effective in both case management and assessment.

- Other theoretical approaches highlighted are: family therapy for restoring trust among family members and assisting family members to develop more appropriate responses in dealing with gamblers' debt issue (e.g. not paying the debt for them) so as to strengthen protective factors and weaken support for gambling behaviour. A bio-psycho-social approach is adopted to reach a more comprehensive perspective in order to explain the acquisition and maintenance of gambling behaviour. This in turn provides very useful information for assessment and treatment.

- The only two theoretical approaches that are perceived as best practice by local counsellors and are not mentioned in the major critical review on pathological gambling are: narrative therapy and client-centered therapy. Local counsellors suggest that narrative therapy is applicable to work with clients (especially female) with hidden unconscious problems whilst the client-centered therapy was effective in relationship building.

- One counsellor also suggests that motivational interviewing could be applied to explore the pros and cons of gambling in the initial stage of treatment, followed by cognitive behavioural techniques to change illogical and erroneous beliefs and gambling behaviour; and finally to focus on the reconstruction of life goals and self-worth to work on relapse prevention. This novel viewpoint involved the application of eclectic approaches in the different stages of counselling.

b. Definition of successful cases. Interviews with the counsellors revealed that although "the ability to control gambling" and "total abstinence from gambling for 6 months" are core outcome indicators for measuring service outcome, most of them still considered them to be insufficient. They made the following recommendations:

    - Gamblers are confronted with various kinds of underlying difficulties which precipitated and perpetuated the gambling problem. **Hence, treatment goals, mutually agreed by counsellors and gamblers, that might address these factors are of the first importance**. Illustrations of treatment goals include resolution of emotional problems, debt control, crisis management, financial management, reconstruction of self-esteem, hope, life value and enhancement of self-control. It is recommended that a clear delineation of how to incorporate counsellors' and service recipients' perspectives of treatment goals in the outcome indicators be worked out.

    - This observation was consistent with the service expectations of the gamblers. Apart from giving up gambling, more than 50.0% of the service-user participants in the current study wanted to resolve a series of problems in their life that precipitated and perpetuated the gambling problem, such as financial crisis, anxiety/mood problems, family problems and interpersonal problems.

- The recommendations of Toneatto and Ladouceur (2003) support the counsellors' viewpoints. They noted that dichotomous description of the treatment results, e.g. success-failure or abstinence - non-abstinence, was too narrowly defined and should be expanded to include various kinds of treatment goals that fit the individual gambler. Blaszczynski, Alex, Silove & Derrick (1995) also list 9 key outcome indicators of successful gambling counselling treatment, other than total abstinence or control of gambling.

c. To better incorporate the definition of successful case management into the outcome indicators, we recommend that definitions of the following outcome indicators should be delineated clearly:

    - Percentage of cases showing increased ability to control and manage the emotional and other factors leading to gambling behaviour,
    - Percentage of cases with improvement in other aspects of clients' life which are conducive to eliminating or reducing gambling behaviour,
    - Percentage of positive feedback from users on achievement of programme objectives and effectiveness of programme,
    - Percentage of cases with sustained and consistent use of structural support.

    Specifically, factors leading to, as well as maintaining gambling behaviour (e.g. emotional problems and poor problem solving skills) could overlap with each other. Family issues could be one of the problem areas that precipitated and perpetuated the gambling problems.

    - Based on data collected from service recipients themselves, an average of 7.65 problem areas (S. D. = 6.00) were identified per client that were associated with gambling behaviour. If a case is to be considered successful, should there be improvement in all such problem areas, or just a few of them? Methods to calculate the improvement have to be standardized.

    - In addition, ways to standardize the measurement of various outcome indicators between the two Centres are desperately needed. Without the use of consistent outcome measurements, it is very difficult to have a reliable and fair service evaluation.

- A more accurate specification of service evaluation needs to be achieved. The structure and format of gamblers' self-rated counselling goals attainments used in the current and Jackson et al.'s (2000) study could be used as a reference to modify the existing outcome indicators. This model should include the problem areas, clinical problems as well as adaptive behaviour (e.g. social skills, problem solving skills). By using this format, the service recipients would only need to rate if the items in the questionnaire were relevant to them and, if they were, the degree of problem resolution after receiving the services in a subjective sense. By means of supplementing this subjective account of service effectiveness, the outcome evaluation could also include the record of some objective role status indicators. Illustrations should include employment status, money earned, frequency of gambling and money spent in gambling per month.

6. Conclusion and Recommendations

6.1 Limitations of the Study

This study is the first one of its kind in Hong Kong. As such, there is no basis for comparing the findings of this study in the local context. However, this study is able to identify the performance levels of the two Counselling and Treatment Centres for Problem and Pathological Gamblers in different key areas in the field of service provision which, we believe, have set the benchmarks for future similar researches.

Overseas experience shows that it is not easy to conduct a research on pathological gamblers, and it is not easy in a Chinese society like Hong Kong. A lot of service recipients simply refused to take part in the study because they were not prepared to reveal what they considered as a shameful experience from which they were anxious to hide. Many dropped out from the research for similar reason. This will, no doubt, affect the final findings. **The research team would like to recommend that longitudinal case studies can be used to identify the changes, effects and sustainability of the services for different types of pathological gamblers in future researches.**

6.2 The Overall Effectiveness of the Services Provided by the Two Treatment Centres

6.2.1 The Caritas and the Tung Wah Group of Hospitals are two long-standing prestigious organizations in Hong Kong. They provide a wide range of social, educational and medical services to the general public. Their mission and services are widely accepted and recognized by Hong Kong people. In September 2003, the Caritas and the Tung Wah Group of Hospitals were selected to operate two pilot counselling and treatment centres for problem and pathological gamblers in the New Territories, Hong Kong Island and Kowloon respectively for a duration of 3 years, and receive financial support from the **Ping Wo Fund**. These two Centres are headed by experienced professionals who possess sound knowledge and skills in the planning and implementation of treatment services for gamblers. The work of the two Centres are carried out mainly by a team of professional social workers, counselling personnel and psychologists who work closely together. Due to the low turn-over rate of staff,

and the dedicated efforts of its professional staff members, the two Centres are able to offer steady and comprehensive treatment services to the clientele groups including p/p gamblers and their family members (significant others). Moreover, as both the Caritas and the Tung Wah Group of Hospitals are multi-service agencies, through their existing service units and network the headquarters of the two organizations are in a much better position to play an efficient role in handling internal case referrals, offering support to the two Centres, and help in promoting and publicizing anti-gambling programmes.

6.2.2 In October 2003, the two treatment Centres initiated their services in Wanchai and Tsuen Wan respectively. They have identified their service characteristics and focus, and adhered to their service agreement with HAB. As stated in Interim Report I, the contracted caseload of pathological gamblers reached 500 within a year after the two Centres commenced operation. In accordance with with the nature and scope of the treatment programmes provided, Level I services concentrate on the operation of hot-line/help-line services. Through the hot-line/help-line services, information giving and initial assessment for those potential service-users were launched. This is where the screening took place (The SOGs and the DSM-IV). Level II services focus on individual counselling, treatment group sessions for p/p gamblers and their family members. Once a case has been screened and established, subsequential services at this stage of this level have taken up most of the resources of the two Centres. Level III services require close work with psychiatrists to deal with pathological gamblers having regard to their mental conditions and abilities of self-control, to assess and diagnose what would be the appropriate means of treatment, e.g. the use of medicine, or referral for institutional care. Data also reflected that the two Centres have put in manpower and resources on community education and publicity activities. Various training programmes in gambling treatment were offered to the public, and the two Centres also received visitors from various community groups, individuals and visitors from overseas.

6.2.3 The research findings revealed that the two Centres are operating in the right direction meeting the requirements laid down in the Service Agreement. The findings also indicated that over 90% of the service recipients, including the pathological gamblers and their family members, were satisfied with the services they have received. In terms of quality and quantity, almost 70% of the closed cases on the average were successful cases. Hence, it is considered that the two Centres are able to perform the following specialized functions in an effective

manner:

a. providing appropriate and effective counselling and treatment services for problem/pathological gamblers and their family members;

b. facilitating the development of best practices and expertise in counselling and treatment services for problem/pathological gamblers, as well as developing the requisite network for the concerned parties in Hong Kong;

c. assisting in the collection of relevant data and statistics to enhance better understanding about the behaviour of the clients and any risk factors that would cause concern; and

d. reaching out to the general public drawing their attention on problem and pathological gambling, and the preventive measures available.

6.2.4 It is most important for the research team to find out whether or not the gambling treatment services provided by the two Centres in the past 27 months have met their objectives and, if they have, were they operated in a cost-effective manner. This evaluation research majors in the quantity, quality, effectiveness, and the future directions of the services and treatment for p/p gambling.

It is crucial to point out that since gambling treatment services were operated formally and systematically with public funds for the first time in Hong Kong, there is no precedent case or any locally established benchmark to follow in evaluating the outcomes of the services. Drawing reference from the experiences of foreign countries is an alternative, but to draw a direct comparison would not be appropriate since gambling in Hong Kong has a very unique Chinese cultural context. It is not advisable to borrow experiences directly from the western culture, which might end up with little use to a study.

It is therefore, in fact, ungrounded to judge how much services are sufficient, or how many telephone enquires should be regarded as meeting the target. Similarly, it is equally difficult to conclude on what should be the appropriate target numbers of Level II successfully handled cases, p/p gamblers and significant others groups, active caseload and cases closed after successful intervention; or the appropriate amount of time spent for a counselling session or a group meeting; or what should be the target number of publicity progammes and anti-gambling seminars each Centre should organize. No satisfactory evaluation could therefore be reached and produced. It only is affirmative that both Centres

had exceeded set targets in terms of the number of Level II cases they received and handled. On very exceptional basis, the Ping Wo Fund Advisory Committee had approved an additional social worker post for each Centre on an one-off basis in 2005.

The earlier parts of this report have already addressed in detail the evaluation of the content, quantity and quality, and effectiveness of the services. The evaluation on the quality of services provided by the two Centres is the major part of this study and is most time-consuming. Section 5.3 of the report provides detailed documentation on service quality. The research team was committed to finding out two most important indicators for the effectiveness of the services. They are,

a. the percentage of Level II cases which showed increased ability of control, and ability to manage the social, emotional, financial and other factors of the~~ir~~ gambling activities, and
b. the percentage of Level II cases which achieved and maintained complete abstinence for at least six months after the termination of treatment programmes, including group support services.

Findings showed that the goals p/p gamblers wanted to achieve through receiving services from the two Centres are, with descending priority, (i) total abstinence from gambling; (ii) development of the ability to exercise self-control on gambling; (iii) resolution of financial crisis, (iv) resolution of family problems, and (v) resolution of personal emotional problems. The outcome measurement of the services showed that the most significant effectiveness of the services, including case and group counselling, were (i) the ability to control desire to gamble, (ii) development of responsibility for own gambling behaviour and consequences, and (iii) improved social skills and family relationships. Findings revealed that after receiving services for six months, the gambling behaviour of the users had not deteriorated, and their perceived effects of the services by priority were (i) gaining better understanding of one's own gambling behaviour and its consequences, (ii) becoming more capable of controlling one's desire to gamble, (iii) being able to solve financial problems, and (iv) being able to solve family problems. **To conclude, outcome measurement reflected satisfactory cost-effectiveness of the services provided by the two Centres.**

The research team would like to point out here again that the causes of pathological gambling are complex and intertwined. So far there is no single remedy for problematic gambling behaviour. Irrespective of the types of services and therapeutic approaches the two Centres are adopting, there are bound

to be criticisms and queries concerning their effectiveness. Whilst we are still in search of the best practice model for treatment of pathological gambling, it is fair to conclude with the present findings that the two Centres are providing effective treatment services for problematic/pathological gambling. These services have reached expected targets and objectives, and they are well received by p/p gamblers and their families.

6.3 Discussion on Treatment Services for Problem and Pathological Gamblers in Hong Kong

6.3.1 Gambling has existed in Chinese societies as long as one can remember, and Hong Kong is one among them. Playing mahjong in banquets or at home are prevalent. Playing card games, betting on mark six, horse racings and soccer games are only some other examples. Any such behaviour is commonly accepted as a form of "social activity". The majority of Hong Kong people do not see these as serious misbehaviour or pathological gambling. In the absence of convincing research evidence and systematic prevalence study, no judgment can be made on the relationship between participation in these popular forms of gambling and the development of pathological gambling behaviour. On the other hand, neither can one deny that pathological gambling is not serious in Hong Kong, given the service statistics systematically collected from the two Centres since their commencement.

6.3.2 Not much is known about the prevalence and etiology of pathological gambling, least to say about the treatment of such gambling behaviour. The research team noted from a review of the literature that relatively few outcome studies exist in Hong Kong or overseas, and most of them lack a clear conceptual model and specification of outcome criteria. They also fail to report compliance and attrition rates, fail to offer convincing description of actual treatment involved or measures to maintain treatment fidelity by the counsellors, nor providing adequate length of follow-up. *"At face value, there are few concrete observations that can be said of the effectiveness of treatment approaches for problem and pathological gambling beyond the fact that some are effective to some extent over an unknown follow-up period"* said Blaszczynski, who is considered one of the authorities in implementing treatment programmes for pathological gamblers in Australia (Blaszczynski, 1999).

6.3.3 However, it is the view of the research team that the definition of treatment in the local context needs to be a broad one. We will define treatment as: (i) activities directed at individuals for the purpose of lessening adverse behaviour associated with problem and/or pathological gambling, and (ii) activities aimed at groups of individuals and their significant others to prevent gambling problems from arising in the first place. Following such definitions, the model of treatment moves on along three stages: **acute and appropriate intervention, followed by rehabilitation and ending with maintenance**. These three stages can vary according to the philosophy of the providers, the settings in which treatment takes place, and the specific approaches employed.

6.3.4 Gambling, in particular social gambling, is generally perceived as a culturally acceptable form of entertainment in Hong Kong. Slightly over 80% of Hong Kong residents aged 15 to 64 years reported to have gambled during the past year (A Study of Hong Kong People's Participation in Gambling Activities, The University of Hong Kong, 2005), as compared with a lower proportion of 78 % in the Gambling Prevalence Survey done in 2001 (The Hong Kong Polytechnic University, 2001). With such commonly accepted attitude, the advancement in technologies nowadays (e.g. Internet gambling and telephone wagering), and the rapid expansion of gambling industries in Asia around, where Macao has ended gambling monopoly in 2001, a wider spread of pathological gambling in Hong Kong is foreseen in the near future. Unfortunately, there is no adequate research which is capable of estimating future service need accurately or measuring the extent of existing unmet need for treatment. However, evidence for proliferation of pathological gambling has been provided in the 2005 Survey, which indicated the prevalence rate of pathological gambling rose from 1.8% in 2001 to 2.2% in 2005, using DSM-IV criteria-based screens. **In response to this and the findings revealed in this study, there are justifications for continuous funding support on treatment programmes for p/p gamblers and their families, and that these treatment services should be carefully planned and expanded.** This is also the opinion of a study carried out by the University of Hong Kong : *"While there is a modest increase in the estimated number of pathological gamblers in the society, as assessed using DSM-IV, the overall percentage share of p/p gamblers in the community has remained stable (around 5%). This points to a continued need to provide appropriate remedial service for p/p gamblers"* (A Study of Hong Kong People's Participation in Gambling Activities, Social Science Research Centre, The University of Hong Kong, page 96).

6.3.5 Before we move onto proposing the future service delivery model, we think the following are crucial factors that would affect the philosophy, aims and design of treatment services for p/p gamblers in Hong Kong:

a. The causes of pathological gambling are complicated and they are embedded in the culture, subculture and social systems within which the individual is situated, and one's psychological conditions also count. Apart from the crude distinction between those who gamble and those who never do, the research team further identified four types of people with different gambling behaviour. They include (i) situational gamblers, such as those who would play "mahjong" at a wedding banquet when urged by other guests; (ii) social gamblers, those who are interested in gambling, but have good self-control ability and would never over gamble; (iii) problematic gamblers, those who gamble to the extent that their personal and work lives are being affected adversely; and (iv) pathological gamblers, those who indulge themselves in gambling even when they are heavily in debts.

   As far as evaluation is concerned, a review of the approaches, content and outcomes of the two Centres leads us to the conclusions that the first and second groups of persons do not need professional counselling services; the third group is identified as "problematic gamblers"; and the fourth group is screened out as "pathological gamblers". Whilst the problem gamblers need counselling, clients of the last group require correctional treatment. Being obsessive gamblers who lack self-control and are indulged in the behaviour with no regard to the harmful consequences imposed on their family and work and the society, **they are the group of gamblers in the most urgent need for treatment. Provided we can reliably identify this type of gamblers through established process of service delivery, we should target and prioritize them for treatment services and devote resources to help them recover.**

b. Treatment for problem and pathological gamblers has been provided in many ways and in many settings. So far, no systematic compilation of treatment services for pathological gambling has been made in the United States or, for that matter, the western world. **It is also important to note that recovery from pathological gambling can sometimes take place without formal treatment.** Such individuals have been classified by various descriptors, for example, so-called spontaneous and natural recovery (Wynne, 1998). Reasons for ceasing addictive behaviour can be categorized into internal and external ones;

and Hodgins and Peden (2002) further remarked that reasons for stopping gambling without interventions were internal in nature.

c. A good understanding on the characteristics, demographics, gambling severity, personal and social consequences associated with gambling of those who seek help is vital on developing effective treatment. Findings revealed that as far as Level II cases are concerned, the majority of treatment seekers of the two Centres are middle-aged male in their 30s and 50s, with primary and junior secondary school education level, and over 60% of them are working in the service sector. Furthermore, over 80% of them reported to have financial and debts problems; over 60% of them reported with emotional problems and around 50% of them are suffering from poor family and marital relationship.

d. Up to now, there is still a lack of effective tools to screen and differentiate accurately various types of gamblers in Hong Kong. Common tools currently in use are those directly borrowed and translated from the West. These include: South Oaks Gambling Screen (SOGs) developed by Lesieur and Blume (1987), DSM-IV of the American Psychiatric Association (1994), and the questionnaire adopted by the Gamblers Anonymous (GA). Whilst these are useful tools, their predictive validity has not been established. Besides, these tools were developed in the western context of which the culture and language are so different from the Chinese. We shall continue with our efforts to develop a set of effective screening tools that are relevant to Hong Kong. **As at present, the research team is of the view that the DSM-IV, relative to the other tools mentioned, is a reliable and valid screening tool that we should adopt in screening and assessing the severity of gambling problems of service-seekers at the present stage, especially when the priority is to identify pathological gamblers from service seekers.**

e. As reflected in this evaluation study, the two Centres have utilized both individual counselling and group treatment methods in their work. The theoretical foundations on which they relied included Cognitive Behavioural Therapies and Family Therapies, which are in fact mainstream theoretical orientations directing intervention for local pathological gamblers and their families. Cognitive-behavioural therapies, flourished in the 1960s and 1970s, gained its popularity and key position for treating pathological gamblers in the 1990s (Sharpe & Terrier 1993; Blaszczski & Silove, 1995; Lopez-Viets & Miller 1997; Petry & Armontano, 1999; Sharpe, 2002). The initial results of

this approach and its techniques appear to be promising, both in local and overseas experiences. Hence, as far as treatment methodology is concerned, the research team believes that **the cognitive-behavioural therapies which focus on altering cognitions and changing gambling behaviour of the pathological gamblers should be adopted in casework services for pathological gamblers, supplemented by treatment groups for the gamblers and their family members. Such "case-in-group" approach appears to be an appropriate and effective treatment for local p/p gamblers and their families.**

f. To conclude, as far as the provision of treatment programmes for p/p gamblers is concerned, the research team would like to put forward the following for the Government to consider when planning future services for p/p gamblers:

(i) Literature has revealed that some problem gamblers or pathological gamblers have dropped their gambling habit, or cut down their gambling behaviour even though they have not received any counselling or therapy.

(ii) The causes of pathological gambling are complicated and embedded in the cultural, subcultural and social systems within which the individual is situated. In addition, one's psychological and social conditions also have an influence. **There exists no single cure or a single best model for treatment.**

(iii) As indicated in our research findings, we must stress that gambling behaviour cannot be totally exterminated or aimed for total abstinence. **Treatment with positive outcome often directs at helping gamblers who understand their own personal responsibility, such that they know when and how to exercise self-control even when engaging in gambling activities. This allows the use of treatment methods other than the CB approach.**

(iv) **When a service delivery model is to be developed, its feasibility, cost-effectiveness and sustainability must be carefully considered.** At the same time, whether or not there are sufficient resources to finance it is also an important factor in determining the acceptability and feasibility of the service delivery model.

(v) **Although the call for service expansion is explicit and loud, the research team adopts a supportive but cautious manner in the justification for a permanent provision of services, given the competing demands for other**

community services in our society. Nevertheless, based on the findings of the study, a reasonable and affordable expansion on treatment programmes for p/p gamblers is recommended.

(vi) Finally, we note that the Government has put in place (for example, in the Betting Duty Ordinance) measures to restrict the gambling-relatd advertisements on television or radio. **The media, in particular the newspapers, should exercise self-control in publishing such advertisements.** For example, they should consider separating the odds from the sports news; and promulgating in advertisements warnings of the seriousness of problems caused by excessive gambling.

6.4 Recommendations on the Development and Operations of Treatment Programmes for Problem and Pathological Gamblers

6.4.1 The two Centres have been running for almost three years. Important data collected throw lights on clients' characteristics and needs, strengths of the service operators, intervention methods used by the frontline workers, as well as the effectiveness of the services and the satisfaction of the service users. Evaluation on the outputs and outcomes of the two Centres is positive thus far. These results corresponded well with the model proposed by the Problem Gambling Research Programme of the School of Social Work, University of Melborne, Australia, in 2002. Therefore, it is considered that **the two pilot Centres have reached the essential benchmarks in the provision of counselling services to the pathological gamblers and their families.** On this basis, the research team would like to put forth the following recommendations:

- **To support the two gambling treatment centres at the current service level for another 2 years up to 30 September 2008. The operation hours of the existing hotline service (1834633) could be considered to be extended to round-the-clock on a pilot basis. The future development of the treatment centres and whether additional resources should be put into their operation should be reviewed upon the commissioning of another in-depth research on their cost-effectiveness and the demonstration of continual service needs.**

- **A community-based approach focusing on establishing capacity building among gamblers, potential gamblers and their families could be considered as an alternative treatment model. The Government could consider establishing**

two small treatment centres with a smaller group of counsellors/social workers to provide treatment services to p/p gamblers and their families in Kowloon and other areas on a pilot basis. These two treatment centres could consider alternative treatment models of which a community-based approach in the design and implementation of their treatment programmes is recommended.

- **With reference to the findings of the evaluation study, the research team would like to make the following recommendations on the role differentiation of the four centres in relation to the needs and characteristics of targeted clienteles, cost-effective utilization of resources and further development of the gambling counselling services in Hong Kong.**

  (1) The two centres operated by Tung Wah and Caritas will maintain their existing counselling and support services for p/p gamblers and their families;
  (2) The two new and smaller centres will develop and experiment more dynamic and innovative approaches to serve the needs of:
    (a) elderly gamblers (e.g. those involved frequently in group gambling in public housing estates.);
    (b) gamblers who belong to ethnic minorities;
    (c) youth, especially secondary school students; and
    (d) women, especially housewives aged between 30-60.

- **It is also suggested that if possible, the Ping Wo Fund could set aside certain resources to encourage non-governmental organization, schools and other community organizations to apply for funds to launch prevention and/or treatment programmes for p/p gamblers on a smaller-scale. The Ping Wo Fund Advisory Committee could consider such applications as appropriate.**

6.5 Recommendations on how the Existing Output and Outcome indicators could be revised/enhanced in view of the continuation of current services

Although the two pilot Centres have reached the essential benchmarks in the provision of counselling services to the pathological gamblers and their families, the research team notes the inconsistencies of benchmarks and application of them by the two Centres in some areas. On this basis, the research team would like to put forth the following revised output and outcome indicators for HAB to consider:

Service Output

	Attainment level (per year)
1. Total no. of calls	8000
2. Total no. of calls taken	5000
3. Total no. of new cases who receive Level 1 service	2000
4. Total no. of new cases who receive Level 2/3 services	500
5. No. of clients who received Level 2/3 services	700
6. No. of counselling and treatment sessions	3000
7. No. of mutual support / self-help group sessions	150
8. No. of staff and professional training sessions	10
9. No. of participants attended the staff and professional training	200
10. No. of public education programmes	30
11. No. of participants attended the public education programmes	6000

Outcome indicators

	Attainment level (per year)
1. Percentage of cases achieving and maintaining complete abstinence for half a year upon termination of treatment (excluding social gambling)	50%
2. Percentage of cases showing increased ability of control, and ability to manage the emotional, cost and other factors leading to their gambling activities	65%

3. Percentage of cases with sustained and consistent use of structural support	60%
4. Percentage of cases closed with attainment of agreed goals in the case plan	70%
5. Percentage of cases with improvements in other aspects of clients' life which are conducive to eliminating or reducing their gambling problems	75%
6. Percentage of positive feedback from users on achievement of programme objectives and effectiveness of programme	90%

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