

# Rapport de recherche

PROGRAMME ACTIONS CONCERTÉES

## Évaluation de l'impact d'un programme de traitement des problèmes de jeu offert à la population adolescente québécoise

### Chercheur principal

Jeffrey L. Derevensky, Université McGill

### Co-chercheur(s)

Rina Gupta, Université McGill  
Isabelle Martin, Université McGill

### Établissement gestionnaire de la subvention

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Jeffrey Derevensky, Rina Gupta, Isabelle Martin  
McGill University

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## **Part A- Context**

Au Québec, comme ailleurs dans le monde, les adolescents participent à diverses formes de jeux d'argent (Martin, Gupta et Derevensky, 2009). La majorité joue occasionnellement et leurs activités de jeu portent à peu de conséquences. Pour certains autres, le comportement de jeu mènera à l'expérience de conséquences graves pouvant nécessiter le recours à des services de santé. Une enquête réalisée dans les écoles secondaires québécoises à l'automne 2008 révèle que 2% des élèves sont qualifiés de joueur pathologique probable tandis que 4 % sont jugés à risque de développer une dépendance au jeu (Martin et al., 2009). Bien qu'une importante diminution de la participation soit observée depuis 2000, la prévalence du jeu problématique ou pathologique demeure stable. Les conséquences d'une dépendance au jeu peuvent être graves et sont considérables, tant pour le joueur que ses proches, allant des difficultés familiales et scolaires, aux difficultés relationnelles et judiciaires, en passant par les problèmes de santé physique et mentale (Jacobs, 2000).

Malgré l'accumulation de connaissances sur les conséquences d'un problème de jeu, il n'existe à ce jour que très peu de services ayant fait l'objet d'une évaluation scientifique rigoureuse (Bertrand 2006). Il est possible de trouver certains documents relatant les « meilleures pratiques » favorisant des résultats positifs (Bertrand et Menard 2005), mais on dénote l'absence de documentation sur l'impact des traitements du jeu pathologique sur les jeunes.

Parmi les rares études de cas recensées, une évaluation d'un programme de prévention du jeu pathologique a été menée auprès d'adolescents à travers cinq écoles de la région de Québec (Ferland, Ladouceur et Vitaro, 2005). Ce programme adapté d'un programme de prévention de l'alcool visait surtout à modifier les connaissances et les attitudes des jeunes face aux jeux d'hasard et d'argent. Malgré les résultats positifs identifiés, le rôle exclusif attribué aux connaissances et aux habiletés empêche une évaluation plus large des facteurs autre que cognitifs pouvant influencer le comportement face au jeu d'argent. Une seconde étude d'évaluation a été récemment publiée (Takhusi et al., 2004). Cette étude qualitative évalue le développement d'un programme de prévention cognitivo-comportemental pour joueurs pathologiques de niveau collégial. Des 302 étudiants âgés entre 18 et 21 ans qui ont complété le questionnaire de dépistage (SOGS), 28 ont été retenus pour participer au traitement et à son évaluation, selon un contrôle randomisé. Les résultats préliminaires de cette étude indiquent que la thérapie cognitivo-comportementale permet de modifier efficacement le comportement du jeu chez ces jeunes collégiens.

Cependant, le nombre limité de sujets et la seule évaluation des facteurs cognitifs limitent la portée de cette étude. Considérant les faiblesses méthodologiques de ces deux recherches, l'évaluation de l'efficacité et de l'impact d'un programme de traitement jeunesse du jeu pathologique doit être entreprise en considérant non seulement les facteurs cognitifs, mais l'ensemble des facteurs psycho-émotionnels, environnementaux et sociaux pouvant affecter le comportement du jeu problématique.

Aux États-Unis, quelques études ont documenté l'impact de traitements offerts aux jeunes aux prises avec un problème de consommation de drogues (Clark, Horton, Dennis et Babor, 2002; Waldron, Brody et Slesnick, 2001). La présence de résultats similaires est notée quant à l'efficacité des traitements, qui s'appuient sur divers cadres thérapeutiques, notamment le cadre motivationnel, cognitivo-comportemental, familial et communautaire (Bertrand et Ménard, 2005). Dans une récente étude, Chung et ses collaborateurs (2005) ont suivi et analysé pendant un an les trajectoires de consommation de drogues et les symptômes d'adolescents ayant suivi un programme de traitement. Les auteurs concluent à l'importance de considérer à la fois les changements dans les habitudes de consommation et l'occurrence et la gravité des symptômes liés à la consommation de drogues et d'alcool. Appliquée à la problématique du jeu, cette recommandation inciterait à ne pas considérer seulement l'abstinence ou la fréquence de participation comme mesure de l'efficacité du traitement, mais d'élargir les mesures pour inclure des facteurs représentant l'occurrence et la gravité des symptômes liés au jeu pathologique (anxiété, relations interpersonnelles, efficacité personnelle, etc.).

À la lumière des résultats recensés dans la documentation et des constats du CPLT et du FOCRPAT face à la situation des pratiques au Québec, il nous semblait impératif de pallier aux lacunes au regard de la connaissance de l'impact des programmes offerts aux jeunes québécois aux prises avec une dépendance aux jeux d'argent. Pour ce faire, nous avons proposé d'évaluer l'efficacité du programme offert par les centres *Le Grand Chemin*

aux adolescents québécois. Ces trois centres de traitement de la toxicomanie et des problèmes de jeu, membre de la FQCRPAT, offrent aux jeunes un traitement, à l'interne (6 semaines), qui se base sur le modèle des 12 étapes des Alcooliques Anonymes (AA).

### **Questions et objectifs de recherche**

L'objectif général de cette recherche était d'évaluer l'efficacité et l'impact du « programme Jeu » offert par les centres *Le Grand Chemin* aux adolescents québécois aux prises avec une dépendance aux jeux d'argent. Les objectifs spécifiques étaient de divers ordres :

- a) L'impact du traitement sur les attitudes et cognitions des jeunes vis-à-vis les jeux d'argent, de même que leur comportement de jeu
- b) de mieux comprendre le rôle des caractéristiques individuelles (âge, sexe, multi dépendance; santé mentale, impulsivité, comportement) et familiales (fonctionnement familial, qualité des relations parent-enfant) sur l'impact du traitement, et vice-versa.
- c) de mieux comprendre le rôle joué par l'engagement et l'implication des parents dans la réussite du traitement.
- d) connaître et identifier les caractéristiques du traitement étant les plus efficaces. Ainsi, la satisfaction des adolescents a été examinée, notamment, les modalités du programme (la durée, le nombre de sessions offertes et le type de rencontre proposées (groupe et individuelle), l'approche préconisée (abstinence) et les connaissances et le professionnalisme des intervenants).

## **Part B- Potential solutions and the results, impacts, and implications of the research**

The results of this research are most relevant to treatment providers of youth experiencing gambling dependency, as well as to those who make decisions as to where to allocate treatment funds. The youth who participated in the current project were inpatients at Les Centres Grand Chemin, three treatment facilities specializing in addressing addictive disorders in youth. In order to receive inpatient treatment for a gambling problem, these youth first have to qualify for a substance abuse problem. As such, the youth addressed in this project are dually dependent.

Our results point to a very favourable outcome for those who undergo and complete the treatment program at these centres. Meaningful improvements were noted for the majority of participants, whereby emotional health improved, family relations were improved, erroneous cognitions relating to gambling were reduced, and their perceived ability to control future gambling behaviors are maximized. Parental participation seems to play a key role in the success of the interventions.

The main concerns revolving around this project are focused on the low retention rate of those who initially present themselves at these centres with a gambling disorder. We acknowledge that it is not atypical to have problems with patient retention in addiction treatment centres, but believe that there could be numerous factors contributing to this problem. We wonder if one of these factors has to do with the fact that in order to be able to receive treatment for a gambling problem at Grand Chemin, one must also

have a diagnosed substance abuse problem. Is it a distinct likelihood that dually addicted youth are much more difficult to retain in therapy? Policy questions arise focused on whether Québec youth would be better served if these centres would be able to advertise and provide treatment for youth only experiencing gambling dependency, without requiring them to have a substance abuse issue as the qualifying criteria. Policy makers may consider making changes such that Les Centres Grand Chemin or other inpatient treatment facilities are able to receive funding to address youth whose primary problem is one of pathological gambling only.

The generalizability of these results is somewhat limited. We anticipated more subjects with a gambling disorder would have been obtained. This resulted in extending the study an extra year to be able to include more youth in the study. In addition to the basic standard retention issues, there appears to have been some resistance among workers at the three Grand Chemin treatment centers concerning the extra work this study represented for them (e.g., asking youth to complete questionnaires at specific times). Our request to extend the study deadline was prompted by David Laplante's comments that problems had been resolved and that the staff would be more active in recruiting and retaining participants. However, unfortunately the rate of recruitment did not appreciably increase.

We remain concerned about the low retention rate of individuals in the treatment program overall. Of those who met the criteria for problem gambling and who initially agreed to participate in this research, only 64%

completed the 6 week therapy, 7% were available at the first follow-up (T3) and only one individual participated at the last follow-up (T4).

Reports indicated that several individuals met the problem gambling criteria but were not included in the study as they voluntarily withdrew from the center. Several other individuals who met the problem gambling criteria were not included in the study as they were asked to leave the treatment centre due to certain unacceptable behaviours. If we take these individuals into consideration, the retention rate drops even lower. Those who entered the study with the greatest degree of gambling pathology (as assessed by the DSM-IV-J) and who also have parents whom they perceive to have addictive behaviours were primarily individuals who did not complete the 6 week treatment program. This is unfortunate, as it appears that these individuals (and their parents) were likely the individuals who could benefit the most from the intervention.

Since there are only 9 individuals who completed the 6 week inpatient therapy, the results should be interpreted with caution. Nonetheless, the results suggest numerous positive impacts resulting from the treatment intervention at the Les Centres Grand Chemin.

There are several key messages arising from this treatment evaluation. For parents of Quebec youth struggling with a gambling dependency, they should be aware that treatment is offered via Les Centres Grand Chemin, and that it is an effective program. Parental involvement is important as it appears to contribute to the success of the interventions. For inpatient treatment providers key messages would include the following:

patient retention should be a priority, as it is those who need it the most that tend not to complete. Treatment providers should also involve parents in the therapeutic process whenever possible to maximize short-term and long-term gains. For researchers, the key message would be to include several measures of treatment effectiveness, including emotional functioning, family functioning, gambling-related cognitions, perceived self-control towards gambling, and a measure of problem gambling severity. In order to deem a program effective, improvements should take place across all of these areas.

## **Part C- Methodology**

Specific interventionists at each of the three Grand Chemin treatment centres were assigned to help facilitate the data collection. Mr. David Laplante, director of professional services at Grand Chemin, oversaw all research activities at his three treatment facilities. Mr. Laplante and members of his team met with the McGill team on multiple occasions to solidify the methodological strategy prior to and during the data collection phase.

All youth were to be screened for a gambling problem at intake (Time 1) at the three participating Grand Chemin treatment centers. Those youth meeting the criteria for problem gambling (a score of 3 or more on the DSM-IV-J) were asked to participate in this study. Parental permission was sought to provide consent for their participation as well. Only 14 individuals were included in this project as a result of meeting the criteria for problem gambling and substance abuse, and providing consent to participate. Of those 14 individuals, 9 completed the 6 week therapy (Time 2), and 4 completed forms at a follow-up visit two months after the completion of the therapy (Time 3). Only one individual completed the final set of instruments 6 months after the termination of therapy (Time 4).

### **Instruments**

Numerous instruments were employed. For more information on the instruments used and times of administration, please see Annex 1.

### **Data treatment & Analyses**

All data was processed and entered by our McGill team. Repeated measures analyses were performed to assess the impact of treatment.

## **Part D- Results**

**The Key results are presented here in summary form. All results must be interpreted with caution and are viewed as being preliminary due to the small sample size (9 individuals who completed the 6 week therapy). For more details on the data and statistical analyses, please refer to Annex 2.**

As previously noted, only 14 individuals were included in this project as a result of meeting the criteria for problem gambling and substance abuse, and providing consent to participate. Of those 14 individuals, 9 completed the 6 week therapy (Time 2), and 4 completed forms at a follow-up visit two months after the completion of the therapy (Time 3). Only one individual completed the final set of instruments 6 months after the termination of their therapy (Time 4). The findings reported are organized according to objectives outlined at the outset of the project.

Objective a: Evaluate the impact of treatment on unhealthy attitudes and erroneous cognitions pertaining to gambling, as well as on gambling pathology and perceived gambling control.

A questionnaire was developed for purposes of this study, tapping into the concept of skill and luck as they pertain to gambling activities. The hope was that therapy would be effective in helping these youth understand that gambling activities are primarily driven by factors related to chance, and that the role of skill plays a less dominant role than initially believed. Erroneous beliefs and attitudes were also assessed for change (e.g, "Young people have little risk of developing a gambling problem because they do not have as much access to money as adults").

The results of the GLM repeated measures analyses indicate that for those youth who completed therapy, statistically meaningful gains were achieved for better understanding the roles of skill and luck as they relate to gambling, and in addressing erroneous beliefs and attitudes.

Immediately after completion of the 6 week inpatient therapy (T2), participants completed an instrument designed by the research team to assess gambling preoccupation, intent to gamble in the future, and degree of perceived control towards gambling activities. With respect to gambling behaviors and pathology, the participants completed the DSM-IV-J gambling screen at T3 (to be compared with the initial screening at T1). The results are impressive. Although 50% of respondents still reported thinking about gambling, 80% indicated no intentions of ever gambling again, and with the exception of two individuals who were not confident of their ability to control their gambling behavior in the future, the remaining 80% indicated feeling reasonably confident that they could refrain from gambling in the future. In effect, 7 out of the 9 therapy completers reported meaningful gains. It is not known however if these gains were indeed maintained over time.

With respect to the DSM-IV-J gambling screen assessing gambling pathology, one individual showed no improvement with a score of 6 at T1 and T3. The other three individuals who completed this screen at T3 did in fact experience meaningful reductions in pathological gambling symptoms. It is very unfortunate that not all 9 therapy completers were available to complete this screen as it represents an important aspect of evaluating the therapy effectiveness. There is no way of knowing if the 5 who were not

available at T3 relapsed or if they simply were not interested in continuing their participation. Unfortunately, as a result, it is not possible to derive an overall rate of therapeutic success concerning gambling disorders.

Objective b: Understand the roles played by individual and family characteristics in the impact of treatment, as well as evaluate the impact of treatment on certain individual and family characteristics.

Due to the limited sample size, it was not possible to arrive at any firm conclusions with respect to the roles that individual and family characteristics play in the treatment outcomes. We had anticipated that behavioral history with high risk activities, impulsivity, satisfaction with school experience and record of criminal activity would each play a role in treatment adherence and/or success. However, the data does not support these hypotheses, with no meaningful differences found among those who completed therapy versus those who did not, nor among those with varying treatment success. A qualitative examination of the data indicates that there appears to be two factors that contribute to a lack of therapy compliance among those 5 individuals who consented to participate but did not complete therapy. These 5 individuals had parents whom they perceived to be afflicted with at least two of the following three addictions; alcohol, drugs, and gambling. These 5 individuals also obtained the highest scores of gambling pathology at the intake phase. On a more positive note, those individuals who had parents who were appropriately involved in their child's therapeutic process seemed to fare best overall.

The impact of therapy on certain individual and family characteristics is impressive. With respect to those reporting heightened suicidal risk and depression, the therapeutic intervention appears to have resulted in significant gains. The results of the GLM repeated measures analyses did conclude statistical benefits of the program. This is a very important finding because it is often the case that youth will turn to addictive pastimes as a way of alleviating depression. As well, suicidal risk as a result of feeling there is "no way out" of the cycle of addiction is one of the most concerning symptoms associated with a gambling addiction. The fact that these issues appear to be well addressed by the program is meaningful and can be viewed as a measure of treatment success.

Family functioning and parent-child relationship were assessed pre and post intervention. GLM repeated measures analyses reflected meaningful statistical changes indicating the success of the therapy on these factors. After therapy, participants reported improvements in regards to feeling respected and accepted by their parents. They believed that their parents were more aware of their feelings and were more able to communicate openly with them. With respect to family functioning, the participants reported their family members to be more supportive of one another, less conflict, and more structure and predictability. These represent very meaningful findings given improved familial relationships play a meaningful role in relapse prevention.

Objective c: Understand and evaluate the importance of parental engagement in the treatment process.

Addiction to any type of substance or activity has known negative consequences upon family functioning, often resulting in challenges parent-child relationships. Often parents fail to understand the motivations of their children, with adolescents tending to rebel by shutting their parents out. The importance of incorporating parents into the therapeutic process remains critical, as it can result in parent and child being mutually supportive of one another as opposed to being on opposite sides.

The results suggest that this therapeutic program successfully incorporated parents, resulting in the teenagers feeling better understood and supported by their parents. As was previously mentioned, family functioning and parent-child relationship measures showed meaningful gains. Considering how well the adolescents functioned within this treatment program, we have strong reason to believe that parental engagement in the treatment process is crucial to a successful outcome.

Objective d: Identify the most effective characteristics of treatment, and report on the adolescent's degree of satisfaction with the program.

With such a small sample, we are not able to identify the most effective characteristics of the treatment program, but rather will take into consideration the overall levels of satisfaction reported. Adolescent satisfaction with the program was assessed by five separate indicators: satisfaction with the physical living and therapeutic environment, satisfaction with the organization of the team and the program, satisfaction with the therapy they received, satisfaction with the individual treatment objectives

elaborated for them, and satisfaction with their overall therapeutic gains. The average scores for each of these indices are indicated below. It appears that those individuals who completed the therapy were quite satisfied overall, with the greatest levels of satisfaction pertaining to the individualized treatment objectives outlined for each person. The objectives were perceived as being reasonable, healthy, and arrived at collaboratively between themselves and the treatment provider.

Environment	87.5/100
Organization	85.5/100
Therapy	75/100
Objectives	96/100
Therapy gains	84/100

It is important to note that we unfortunately do not know the degrees of satisfaction (or dissatisfaction) felt by those who left the program prematurely, thus we are not able to portray a fair and just assessment of satisfaction of all youth who entered the treatment program.

In summary, the sum of the results seems to suggest that meaningful gains were achieved by those youth who completed the treatment program. The fact that multiple measures were used proved to be useful in understanding the benefits that can result from inpatient treatment for gambling problems among youth.

This study has significant limitations due to difficulty in obtaining and maintaining youth with gambling problems. Nonetheless, we believe that

important preliminary evidence for treatment effectiveness has been obtained.

There remains a great need to better understand strategies used for the retention of youth with addictive behaviors. Whether dually diagnosed individuals (substance abuse and gambling disorder) are more difficult to retain in an inpatient setting remains of interest. Scientific inquiry into comparisons between inpatient versus outpatient treatment needs to be examined. As well, the issue of relapse in any treatment intervention is paramount. While our conceptual understanding of youth gambling disorders is in its infancy, greater funding and scientific research into the factors for involving parents in the process remains necessary.

## **Part E- Research approaches** (1 page)

The research findings are tenuous provided the small sample of individuals who completed the treatment program. However, some conclusions seem apparent, resulting in recommendations to inpatient treatment providers:

- 1) Every attempt should be made to retain young individuals in therapy, especially those with parents who perceive their parents to be experiencing multiple addictions themselves. It might be important to screen for this at intake and involve the parents as much as possible.
- 2) Expelling youth who “break rules” and show delinquent behaviour may need to be reconsidered. Many of these youth have a history or criminal and delinquent behaviour, so “some” greater degree of tolerance and alternative strategies may be warranted in order to help those who need it most.
- 3) The involvement of the parents in the therapeutic process seems to be a very strong and positive aspect of the treatment. Both inpatient and outpatient programs should offer this as a component of therapy.
- 4) It appears useful to continue to employ multiple measures to determine success when evaluating a treatment program. The current treatment program had a favourable impact on reducing depression, suicidality, gambling-related erroneous cognitions, gambling pathology while enhancing parent-child relationships, family relationship and indices of perceived self-control. All of these represent critical dimensions within the therapeutic success.

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