

**Les effets de la publicité sur les attitudes et les
comportements de jeu des enfants et des adolescents**

**The effects of gambling advertisements on child and adolescent
gambling attitudes and behaviors**

Rapport remis au Fonds de recherche sur la société et la culture
Projet de recherche financé par le Ministère de la santé et des services sociaux

Jeffrey Derevensky, Ph.D.
Alissa Sklar, Ph.D.
Rina Gupta, Ph.D.
Carmen Messerlian, M.Sc.
Michelle Laroche, Ph.D.
Sandra Mansour, M.A.

**International Centre for Youth Gambling Problems and High-Risk Behaviors
McGill University**

September 2007

TABLE OF CONTENTS

LIST OF TABLES	iii
ACKNOWLEDGEMENTS	iv
RÉSUMÉ	v
EXECUTIVE SUMMARY	x
INTRODUCTION.....	1
PRINCIPAL AIMS.....	1
THEORIES OF ADVERTISING	2
Elaboration Likelihood Model.....	3
Third-Person Effect Model	3
Social Learning Theory.....	3
Alcohol and Tobacco Advertising	4
Alcohol Advertising and Youth.....	4
Tobacco Advertising and Youth.....	4
Gambling Advertising.....	5
Gambling Advertising and Youth.....	6
Common Themes in Gambling, Alcohol and Tobacco Advertising.....	7
PHASE 1 METHODOLOGY	8
Epistemological Assumptions.....	8
Context of Study	8
Participants.....	9
Development of Focus Group Guide	9
Contacting the Schools	10
Conducting the Focus Groups.....	10
Transcribing and Coding of the Data.....	11
Data Analysis.....	11
RESULTS	12
Theme I: Exposure to gambling advertisements.....	12
Types of media.....	13
Theme II: Characteristics of gambling advertisements	15
Structural characteristics	15
Situational characteristics	15
Attractive features of gambling advertisements	16
Unattractive features of gambling advertisements.....	16
Theme III: Messages perceived in gambling advertisements	17
Theme IV: Target audiences of gambling advertisements	18

Les effets de la publicité sur les attitudes et les comportements
de jeu des enfants et des adolescents
The effects of gambling advertisements on child and adolescent gambling attitudes and behaviors

Theme V: Influence/impact of gambling advertisements	19
Gender Differences	20
Developmental Trends	21
PHASE II	22
METHODOLOGY	22
Sample	22
Instruments	22
Procedure	24
RESULTS	24
Gambling Behavior	24
Gender Differences	25
Perceptions about Gambling and Gambling Advertisements	26
Developmental Differences	29
Youth with Gambling Problems	29
Problem Gambling by Gender	31
Vulnerability to gambling advertisements	31
DISCUSSION & CONCLUSIONS	33
Impact of Gambling Advertisements	35
Limitations & Implications for Future Research	37
REFERENCES.....	38
APPENDIX A – MODERATOR GUIDE FOR FOCUS GROUPS	44
APPENDIX B – PROTOCOL FOR INTRODUCING FOCUS GROUP.....	45
APPENDIX C – QUESTIONNAIRES.....	46

LIST OF TABLES

Table 1: Participant Distribution by Age and Gender (Phase I)	23
Table 2: Description of Sample (Phase II).....	37
Table 3: Gambling Participation and Severity of Gambling Problems	39
Table 4: Gender Differences in Participation in Different Gambling Games	40
Table 5: Gender Differences in Perceptions About Gambling and Gambling Advertisements	41
Table 6: Age Differences in Perceptions About Gambling and Gambling Advertisements	42
Table 7: Perceptions About Gambling and Gambling Advertisements by Gambling Behavior	44
Table 8: Association Between Problem Gambling Severity and Exposure to Ads ...	46

ACKNOWLEDGEMENTS

We would like to thank all the students who participated in this project, their teachers and the administrative staff in all the schools who graciously volunteered their time and permitted the completion of this study.

The authors acknowledge that this research was funded within the Actions concertées program by the Fonds de recherche sur la société et la culture (FQRSC) in collaboration with le ministère de la Santé et des Services sociaux. The funding of this project was awarded to Drs. Jeffrey Derevensky, Michel Laroche and Rina Gupta. The research findings, results and interpretation, conclusions, recommendations and views expressed in this project are those solely of the authors and are not necessarily those of the FQRSC.

RÉSUMÉ

La présente étude examine l'impact de la publicité entourant les jeux de hasard et d'argent sur les attitudes et les comportements des adolescents. L'étude de l'impact de la publicité est divisée en deux phases : une phase qualitative (phase 1) et une phase quantitative (phase 2). L'objectif de l'examen qualitatif (phase 1) visait à identifier les caractéristiques des publicités sur les jeux de hasard et d'argent et leur influence, telles que perçues par les adolescents. Ces informations ont ensuite été utilisées dans la construction du questionnaire visant à colliger les informations sur les perceptions des participants au regard des caractéristiques structurales et situationnelles des publicités (phase 2). Tous les participants à cette étude sont des élèves fréquentant des écoles secondaires ontariennes et québécoises où la langue d'enseignement primaire est l'anglais.

Lors de la phase 1, 143 adolescents âgés entre 12 et 19 ans ont participé à des groupes de discussion; ils ont été regroupés au sein de 26 groupes. Les données recueillies lors de ces échanges ont été utilisées pour développer le questionnaire servant lors de la phase 2 de l'étude.

En plus de s'exprimer sur l'impact de leur exposition aux publicités entourant les jeux d'argent, les participants ont été invités à commenter cinq différents aspects des publicités : 1) ce qu'ils aimaient et ce qu'ils n'aimaient pas au regard du contenu des publicités; 2) les caractéristiques des publicités les plus saillantes; 3) les messages perçus; 4) les populations ciblées par les publicités; et 5) l'influence des publicités sur eux et sur leurs pairs. Les réponses ont été analysées en fonction de l'âge et du sexe des participants.

Lors de la phase 2, 1 147 adolescents âgés entre 12 et 19 ans ont complété un questionnaire examinant leurs comportements face aux jeux de hasard et d'argent, leur exposition aux publicités entourant ce type de jeux et leurs perceptions des publicités.

Phase 1 – Groupes de discussion

- Les publicités les plus fréquemment observées sont celles entourant la promotion des produits de loterie, suivies des publicités sur panneaux publicitaires pour les jeux de casino. L'Internet est le média le plus fréquemment cité comme source de publicité, suivi de près par les publicités vues à la télévision.
- Les caractéristiques des publicités les plus fréquemment observées et rapportées par les participants sont l'utilisation de couleurs brillantes, l'utilisation de jeunes personnes ayant l'air heureuses et bien dans leur peau, la présence de sommes d'argent importantes et de signes de dollars; l'utilisation de l'humour; et la présence de femmes séduisantes faisant la promotion des divers jeux ou activités.

- Environ 33 % des adolescents reconnaissent que la possibilité de gagner beaucoup d'argent est la caractéristique qu'ils apprécient le plus. Ils rapportent également que la présence de jeunes personnes qui semblent avoir du plaisir exerce également un attrait important.
- Les caractéristiques structurales les plus attrayantes sont, selon les participants : l'utilisation de couleurs brillantes, la présence de femmes attirantes, et l'utilisation de contenu humoristique.
- Les caractéristiques ou les éléments que les jeunes n'aiment pas sont : la grande fréquence d'apparition des publicités, leur description irréaliste des jeux d'argent, la présentation biaisée de joueurs qui gagnent toujours, le manque d'information sur les probabilités réelles de gains; et l'absence de discussions sur les conséquences négatives potentielles associées à la participation aux jeux d'argent. De plus, les participants rapportent une grande aversion pour les publicités de type fenêtre-flash (« pop-up »), sur Internet. Celles-ci dérangent, notamment parce qu'elles forcent l'utilisateur à fermer, à répétition, chacune des fenêtres.
- Les messages les plus fréquemment véhiculés par les publicités sont, selon les participants : les gains sont faciles, les jeux d'argent sont amusants et agréables, les jeux d'argent sont des activités de loisirs inoffensives qui ne requièrent aucun effort, contrairement aux activités scolaires ou au travail.
- Environ 33 % des participants, des adolescents en majorité, se perçoivent comme étant la clientèle cible des publicités. D'autres ont souligné le fait que certaines publicités visent les jeunes qui représentent des clients futurs.
- Certains participants croient que les individus issus de la classe socioéconomique moyenne sont la clientèle-cible des publicités tandis que d'autres croient que ce sont les individus les mieux nantis qui sont visés. Enfin, un troisième groupe de jeunes affirme que les individus les plus pauvres sont ciblés par les publicités.
- Environ 38 % des participants disent être influencés par le contenu des publicités. À l'opposée, une proportion légèrement inférieure (31 %) dit ne pas l'être.
- Seules quelques différences significatives ont été notées entre les participants masculins et féminins au regard de leur exposition aux publicités. Les jeunes hommes étaient, toutes proportions gardées, plus nombreux à rapporter accorder de l'importance à la présence de couleurs brillantes dans les publicités tandis que les jeunes filles ont dit remarquer davantage la présence de personnes ayant l'air d'avoir du plaisir et à l'utilisation de l'humour. Les participants de sexe masculin semblent préférer les caractéristiques structurales des publicités, notamment les couleurs, tandis que les participants de sexe féminin semblent davantage attirés

par les caractéristiques situationnelles des publicités, par exemple, l'utilisation de contenu humoristique.

- Les jeunes hommes disent ne pas apprécier la présence d'informations trompeuses au regard des probabilités de gains et les jeunes filles n'apprécient pas la grande fréquence des publicités, qu'elles trouvent souvent ennuyeuses. Enfin, toutes proportions gardées, les garçons rapportent davantage subir l'influence des publicités, en comparaison aux filles, qui semblent croire que les publicités influencent davantage les autres individus.
- En fonction de leur âge, les participants ont été regroupés en trois groupes : la pré-adolescence (12-13 ans); l'adolescence (14-16 ans), et la fin de l'adolescence (17-19 ans). Les participants du second groupe (14-16 ans) ont dit avoir remarqué davantage de publicités sur le poker. Ils sont également ceux qui rapportent avoir vu le plus grand nombre de publicités sur les jeux du casino, tout comme les jeunes préadolescents. L'exposition aux publicités télévisées semble diminuer avec l'âge des participants.
- Les jeunes des deux premiers groupes d'âge remarquent davantage la présence de couleurs brillantes dans les publicités. Les plus jeunes sont aussi plus susceptibles de remarquer la présence des femmes séduisantes. Les adolescents les plus âgés étaient, quant à eux, plus susceptibles de rapporter la présence de contenu humoristique.
- Les participants des deux premiers groupes d'âge préfèrent les publicités utilisant des couleurs brillantes (caractéristiques structurales) tandis que les élèves les plus âgés préfèrent les publicités à contenu plus humoristique (caractéristiques situationnelles). Les élèves les plus âgés rapportent également ne pas apprécier l'utilisation d'information trompeuse sur les chances de gains réelles. De plus, ils admettent d'emblée être influencés par les publicités, comparativement aux élèves plus jeunes (préadolescents et adolescents) qui croient que ce sont les élèves plus âgés qui sont davantage influencés par les publicités, tandis qu'eux ne le seraient pas ou moins.

Phase II - Collecte de données

- Presque tous les jeunes ont dit avoir été exposés aux publicités sur les jeux de hasard et d'argent et plusieurs ont rapporté avoir été "bombardés" par celles-ci : 93 % ont vu des publicités alors qu'ils naviguaient sur Internet, et de ceux-là, 43 % rapportent avoir vu plus de dix publicités non sollicitées (fenêtre flash ou « pop-up »); 60 % ont reçu des publicités par l'intermédiaire de pourriels et 96 % ont remarqué des publicités télévisées.

- Selon une majorité de participants, les principaux messages véhiculés par les publicités sont les suivants : *gagner est facile* (68 %); *vos chances de gagner sont élevées* (60 %); *et participer aux jeux d'argent peut faire de vous une personne riche* (81%).
- Près de la moitié des participants disent percevoir des messages faisant appel au jeu responsable, comme par exemple, *jouer mais soyez avisés des risques associés* (40 %), et *jouer de manière responsable* (45%).
- La plupart des participants font peu de cas des messages véhiculés par ces publicités, et plusieurs disent être informés sur les risques associés à la participation aux jeux d'argent. Près de 66 % considèrent que les messages véhiculés sont irréalistes et 94 % reconnaissent que la participation aux jeux d'argent peut devenir problématique.
- Paradoxalement, 42 % des jeunes interrogés disent que les publicités les incitent à participer aux jeux d'argent et 61 % disent imaginer ce qu'ils pourraient se procurer avec les gains.
- Une proportion non négligeable de participants (7 %) admet jouer à l'occasion ou fréquemment après avoir vu une publicité; les garçons (79 %) et les élèves les plus âgés (secondaire 4 et 5- 57 %) étant, toutes proportions gardées, davantage représentés parmi ces élèves. Ces deux groupes d'élèves sont aussi ceux qui rapportent jouer fréquemment, à diverses formes de jeu, et ils ont une mauvaise perception de leurs chances de gains. En comparaison aux joueurs sociaux, les joueurs problématiques sont davantage représentés parmi les participants qui rapportent jouer à l'occasion ou fréquemment après avoir vu une publicité (3 %, joueurs sociaux, c. 32 %, joueurs problématiques).
- Un peu plus du tiers des participants (35 %) rapporte que le fait de voir une publicité les incite à planifier une participation future.
- Il semble donc que les publicités sur les jeux d'argent exercent davantage d'influence sur les individus qui manifestent déjà un intérêt pour les jeux d'argent, notamment les participants de sexe masculin, plus âgés, et qui sont considérés des joueurs problématiques. Plutôt que d'inciter les non-joueurs à prendre part à des jeux d'argent, il semble que les publicités servent à maintenir les habitudes de jeu chez les jeunes qui y sont déjà initiés, exerçant ainsi un effet néfaste sur les jeunes joueurs qui expérimentent déjà des problèmes avec leur comportement face aux jeux d'argent.

Conclusion

À la lumière des résultats obtenus dans les phases 1 et 2 de cette étude, il ressort que les adolescents sont conscients de la présence de publicités entourant les diverses formes de jeux d'argent. Bien que plusieurs rapportent le fait que les messages véhiculés par les publicités sont souvent irréalistes, notamment quant aux chances de gagner, ils les trouvent tout de même intéressantes. Les résultats de l'étude suggèrent également que les publicités attirent peu de nouveaux clients, mais plutôt, elles renforcent les comportements des individus qui y participent déjà, notamment les joueurs qui sont aux prises avec des problèmes avec leurs comportements face aux jeux d'argent. Ces joueurs sont aussi plus susceptibles de jouer après avoir vu de telles publicités.

L'influence de la publicité sur les jeunes les plus vulnérables, observée dans le cadre de cette étude, est en lien avec diverses observations tirées d'études cliniques et de traitements (Gupta & Derevensky, 2004).

Même si l'impact de la publicité sur les jeux d'argent sur les adolescents a été examiné à l'aide de deux méthodologies différentes pour chacune des phases de cette étude, des recherches futures sont nécessaires pour mieux comprendre l'impact différencié de la publicité sur les divers groupes de jeunes, certains étant davantage soumis à l'influence des publicités, et tenter de déterminer quelles types de pratiques de prévention et d'intervention seraient le plus appropriées pour ces jeunes.

Enfin, il faut souligner le fait que cette étude est de nature transversale. Aussi, aucune prédiction ne peut être faite quant aux impacts à long terme des publicités sur les adolescents. De plus, les données recueillies découlent des perceptions et des estimations des participants quant à l'impact de leur exposition aux publicités. Il faut donc interpréter les résultats avec précaution.

EXECUTIVE SUMMARY

This study is divided into two phases; a qualitative and quantitative examination of the effects of gambling advertisements on child and adolescent gambling attitudes and behaviors. The qualitative component of this study in Phase I was designed to highlight important issues about the characteristics and influence of gambling advertisements as perceived by adolescents. The data is then used to develop the questionnaires for the second phase of the study. In all, 143 adolescents between 12 and 19 years participated in 26 different focus groups in Phase I. In addition to determining their perceived exposure to gambling advertisements, participants were asked questions on five distinct topics. These included their likes and dislikes about the ads, notable features of the ads, perceived messages of the ads, what segment of the population they believed were targeted by the ads, and if they believed themselves or their peers to be influenced by the advertisements. Responses were further analyzed by age and gender. In Phase II, 1,147 youths between the ages of 12 and 19 were presented with a questionnaire about their gambling behaviors, exposure to gambling advertisements and perceptions of these advertisements.

Research Findings

PHASE 1 – Focus Group Findings

- The most common type of gambling advertisement perceived across the groups was for lottery products, followed by billboard ads for casinos. The Internet was the most frequently cited media for gambling advertisements, closely followed by television ads.
- The characteristics of gambling advertisements most frequently noticed by participants were the use of bright flashy colours, the portrayal of young individuals as happy and enjoying themselves, the depictions of large sums of money and dollar signs, the use of humour, and the use of attractive females promoting the product/activity.
- 33% of adolescents' acknowledged the notion of winning lots of money was the feature of the ads they most enjoyed. Participants also reported the portrayal of people enjoying themselves was also appealing.
- The structural elements of the advertisements they reported as most appealing was the bright colours, the depiction of attractive women, and advertisements that were humorous.
- The elements in the ads adolescents most disliked were the annoying frequency and prevalence of gambling advertisements, their unrealistic portrayal of gambling, the deceptive depiction of people always winning, the lack of

information about the real odds of winning, and the complete lack of any discussion of the potential negative consequences associated with gambling. Participants also reported a strong dislike of Internet pop-up gambling ads, as they are reported to be distracting and require the computer user to close them each time.

- The most common messages perceived by participants is that gambling leads to winning (easy money), gambling is fun and enjoyable, and part of a worry-free and entertaining lifestyle, requiring none of the real efforts of school or an actual job.
- 33% of participants perceived themselves, underage adolescents, as the primary target of the ads. Others noted the ads target youth as future participants in gambling activities.
- Participants were divided as to whom they believed to be the main target in terms of socio-economic indicators. Some believed the ads target ‘average’ individuals, others indicated wealthy people, while still others reported poor people.
- A significant portion of respondents (38%) felt they are themselves influenced by gambling ads. A slightly lower percentage (31%) believed they were not influenced by the advertisements.
- In terms of gender differences, there was very minor variation in how participants reported exposure to gambling ads. Males were more likely than females to describe the ads as having bright flashy colours, while females were more likely to notice the ads depicting individuals enjoying themselves, and the use of humour. Overall, males seemed to prefer certain structural characteristics of ads (e.g., flashy colours) and women prefer the situational characteristics (e.g., use of humour). Males reported a dislike of the misleading information regarding odds of winning while females disliked the high prevalence of gambling ads, and found them boring. Males were more likely than females to perceive that gambling ads have an effect on them, while females more likely to say that gambling ads affect others, but not themselves.
- In terms of developmental trends, participants were divided into three groups: early adolescence (12-13 years); middle adolescence (14-16) and late adolescence (17-19). Middle age adolescents noticed more poker ads, while both younger and middle adolescents noticed more casino ads. Reported exposure to TV ads decreased as participants got older.
- Younger and middle age adolescents noticed bright flashy colours more than older groups. The younger adolescents also most likely to notice attractive

females. The older adolescents were more likely to cite humour as a characteristic of the ads.

- In terms of advertisement characteristics rated as desirable, early and middle age adolescents preferred bright flashy colours. Older adolescents preferred humour. Overall, older participants preferred situational characteristics and younger ones preferred structural. Older adolescents were more likely to dislike the deceptive presentation of odds of winning in gambling ads. Older adolescents more readily admitted they felt influenced by gambling ads than those in the younger or middle groups; younger individuals were more likely to believe other adolescents were influenced, in contrast to themselves.

PHASE II - Survey Findings

- Almost all youth report being exposed to advertising and many indicated being “bombarded with messages; 93% of youth report having seen pop-up ads on the Internet, with 43% having received over 10 of these unsolicited messages. Sixty-one percent report receiving spam gambling advertisements by e-mail, and 96% have seen TV advertisements for gambling.
- According to a majority of youth, these ads send a message that winning is easy (68%); your chances of winning are high (60%); and gambling can make you rich (81%).
- Almost half of youth surveyed think that advertisements send a responsible message: “Gamble but know the risks” (40%), and “Gamble responsibly” (45%).
- Most youth are dismissive of the messages in these ads, and are aware of the risks associated with gambling; 66% find that gambling advertisements send unrealistic messages; 94% contend that gambling can become a problem.
- A surprisingly high percentage of youth say they are nevertheless influenced by gambling advertisements; 42% report that gambling advertisements make them want to try it; and 61% imagine/dream of what they could buy with winnings.
- A disconcerting proportion of youth appears susceptible to the lure of gambling advertisements; 7% admit to sometimes or often gambling after seeing a gambling advertisement; and 35% report that ads make them want to gamble in the future.
- Youth who reported sometimes or often gambling after seeing advertisements tended to be male (79%), and in grades 11 or 12 (57%). They also gambled frequently, participated in a number of different gambling activities, and held inaccurate perceptions about their chances of winning. Compared to social

gamblers (3%), a higher proportion of problem gamblers (32%) sometimes or often gambled after seeing ads.

- Problem gamblers are more likely to gamble after seeing an advertisement partly because they are exposed to more ads.
- Overall, gambling advertising is most enticing to individuals most interested in gambling (i.e., males, older youth, and problem gamblers). Rather than inciting non-gamblers to begin gambling, advertisements appear to serve the function of maintaining established gambling habits, and thus have a deleterious effect on youth with gambling problems.

Conclusion

According to the results found in both Phases, it appears that adolescents are highly aware of gambling advertisements. Although many report the advertisements are unrealistic in their portrayal of the odds of winning, they nevertheless find them bright, often humorous with compelling messages about winning money. The results suggest that gambling advertisements may not attract new customers, but simply reinforce existing behaviors, especially for excessive gamblers. Nevertheless, there is evidence that problem gamblers are more likely to respond by gambling when seeing these advertisements. These youth appear to demonstrate a vulnerability to gambling advertisements.

It should be noted that this study is cross sectional, and no causal predictions can be made concerning the long-term effects of advertisement. Moreover, because both of these Phases relied on participants' self-reported estimations of exposure (which typically results in under-estimation of media exposure) and their perceptions of influence. As such, the data needs to be interpreted with caution.

The notion that certain youth problem gamblers are vulnerable to gambling advertisements is consistent with the clinical accounts of therapists and treatment providers (Gupta & Derevensky, 2004).

Although the impact of gambling advertisements on youth has been explored using two different methodologies, further research is needed to understand why some youth are more susceptible than others to the lure of gambling advertisements and to determine whether these youth should be the target of specific prevention and intervention initiatives.

INTRODUCTION

Youth gambling is a growing public health issue that has become a growing concern (Korn & Shaffer, 1999; Messerlian & Derevensky, 2007; Messerlian, Derevensky, & Gupta, 2005). Linked with these concerns are the increasing opportunities to partake in gambling activities that have significantly escalated over the last ten years (Korn, 2000; Volberg, 2003; Woods & Griffiths, 1998). As gambling opportunities and venues increase, so do the number and formats of gambling-related advertisements (Najavits, Grymala, & George, 2003). Youth have been found to be particularly susceptible to the effects of the media. With legalized gambling becoming increasingly widespread and more easily accessible, there is an urgent need to examine such issues in greater depth (Korn, Hurson, & Reynolds, 2005; Korn & Shaffer, 1999). As a result, concern has been raised over the enticement and marketing of gambling.

There is a paucity of research examining the potential effects of gambling advertisements on children and adolescents behavior (Youn, Faber, & Shah, 2000). In contrast, an abundance of research demonstrates the impact of tobacco and alcohol advertisements upon youth behavior. Hence, part of this study seeks to explore parallels among adolescent perceptions of gambling advertisements with alcohol and tobacco advertisements.

In addition, using a qualitative approach in Phase I, an instrument designed to look at the effects of gambling advertisements on youth gambling behavior on a much larger scale was developed for Phase II. The overall results are used to help provide prevention specialists and policy makers in developing socially responsible guidelines.

PRINCIPAL AIMS

This study seeks to identify adolescents' perceptions of gambling advertisements. Specifically, the principal aims of this exploratory study are to investigate adolescents' exposure to various forms of gambling advertisements, which characteristics are appealing, what are the perceived messages contained in the advertisements, whether youth think themselves or their peers are influenced by gambling advertisements, and who they perceive to be the targets of gambling advertisements. A final aim of this study is to identify possible gender and age (i.e., early, middle or late adolescence) differences.

This study is presented in two phases; both qualitative (Phase I) and quantitative (Phase II) methodological approaches are presented. This dual approach is incorporated to facilitate our understanding of the current penetration of gambling advertisements, the messages interpreted by the target population, and their influence upon gambling attitudes and behavior. Through both methodological procedures the following questions are addressed:

1. How much and which gambling advertisements are children and adolescents aware of?
2. What is the relationship between self-reported exposure to gambling advertisements, perceived risks and benefits, and reported gambling attitudes and behavior?
3. Do gambling advertisements result in increased gambling or does gambling result in increased awareness of gambling advertisements?
4. What gambling messages and medium (based upon structural characteristics) are more appealing to children and adolescents?
5. Are the same mechanisms/tactics that work for enticing adults to gamble similar for adolescents?
6. Are individuals with gambling problems more susceptible and at greater risk from exposure to gambling advertisements?

Data collection during Phase I was designed to determine and ascertain the salient characteristics and impact of gambling advertisements amongst children and adolescents (ages 12-18). This qualitative data was derived through multiple directed focus group discussions. The focus groups provided valuable information for the development of the survey instrument which was used in Phase II. This survey instrument was then administered to a large group of adolescents.

THEORIES OF ADVERTISING

It is widely accepted that the media has a powerful effect on people's behaviors and attitudes (De Pelsmacker, Geuens, & Anckaert, 2002; Feeney, 2004; Sogaard & Fonnebo, 1992; Wiseman, Sunday, & Becker, 2005). In Canada, each year, billions of dollars are spent on advertisements for a wide variety of products (Statistics Canada, 2004a). Consequently, youth today spend upwards of a third of their day being exposed, to varying degrees, a multitude of advertisements (Roberts, 2000).

The objective of any given advertisement is to capture the attention of consumers, to maintain their attention for the duration of the entire advertisement, have the consumer relate to what is occurring in the ad, and finally, to feel good about the ad (Igartua, Cheng, & Lopes, 2003; Jones, 1995; Maddock & Fulton, 1996). Hence, the overall goal of an advertisement is to trigger an intrinsic affection for the ad which ultimately leads to purchasing the product or in adopting the messages (particularly important in social marketing campaigns) being espoused. How do advertisers accomplish this? Successful advertisements tend to be relatively short, simple and omit something for the consumer to

think about. In addition, effective ads are appealing, often amusing, sometimes provocative, and entertaining to view or listen to (Jones, 1995; Maddock & Fulton, 1996).

Youth, similar to adults, are exposed to ads through a variety of media. Television, the Internet, billboards, magazines, newspapers, and the radio are common forms of media employed by various advertisers as they reach a significant portion of adolescents on a daily basis.

The literature on marketing and advertising is vast, as numerous theories exist on how advertisements affect and influence individuals' attitudes and behaviors. The following is a brief synopsis highlighting several of these theories.

Elaboration Likelihood Model

This model purports that an individual's level of involvement in an advertisement is only partially dependent upon the effectiveness of the ad. The *elaboration likelihood model* is a theory of persuasion that suggests that individuals fall along a continuum-from low to high involvement- toward any given issue or product presented (i.e., their motivation). The individual's capacity or ability to understand a message falls along a similar continuum. These two factors then determine the effectiveness of a particular ad; predicting and/or altering future behavior. The impact further depends on whether the individual is exposed to the ad via a central (high involvement) route or a peripheral (low involvement) route (Petty & Cacciopo, 1986).

Third-Person Effect Model

An alternative perspective suggests that individuals believe advertisements entice *others* to purchase products or engage in certain activities, but not themselves. While externalizing the impact of such ads, that is, few individuals readily admit that they themselves are influenced by such media messages but that others are, they remain immune to criticism (David, Liu, & Myser, 2004; Davison, 2003; Duck & Mullin, 1995; Huh, Delorme, & Reid, 2004; Salwen & Dupagne, 1999). Nevertheless, group conformity and movement toward existing social norms prompts individuals to purchase the product and/or assimilate its message.

Social Learning Theory

A more prominent psychological perspective suggests adherence to a **social learning theory perspective**. Bandura (1986) suggested that individuals learn and model behaviors through observing others in their environment. This theory also suggests that individuals are likely to model behavior observed by significant others and that they personally value (e.g., film stars playing celebrity poker are perceived more positively than typical individuals playing). The desire to emulate and relate to "winners" is a popular form of advertising by the gaming industry.

Alcohol and Tobacco Advertising

To further understand how gambling advertisements potentially exert their influence on children and adolescents, it is valuable to examine the literature on alcohol and tobacco advertising. The rationale for looking at this literature is to uncover themes and characteristics used in alcohol and tobacco advertising that can be possibly linked to gambling advertising. Hypotheses can then be formulated about which attributes of gambling advertisements affect youth, as drinking, smoking and gambling have been found to be co-morbid behaviors in adolescents (Gupta & Derevensky, 1998a; 1998b; Winters & Anderson, 2004). Hence it is possible that features of alcohol and tobacco advertisements may parallel those of gambling.

Alcohol Advertising and Youth

Much of the literature on alcohol advertising illustrate significant effects on youth drinking behaviors and intentions (Ellickson, Collins, Hambarsoomians, & McCaffrey, 2005; Martin et al., 2002; Saffer, 2002; Shaffer et al., 2000; Wyllie, Zhang, & Casswell, 1998; Wynne & Shaffer, 2003). This literature on alcohol advertising suggests that specific characteristics of alcohol ads are particularly appealing to youth. Some of these characteristics included the use of animals, animated characters, celebrity endorsers, and youth-oriented music (Wyllie et al., 1998). One distinction is the use of 'image' versus 'product' advertisements. Image ads focus primarily on the lifestyle (e.g., fun, adventuresome, popular) featured in the ad, whereas product ads emphasize the value of the product itself (e.g., quality of beer). Kelly and Edwards (1998), in a qualitative study using focus groups, examined adolescent preferences for image versus product advertisements. Their results confirmed that adolescents unanimously preferred image advertisements, given these types of ads focus on the social aspect associated with drinking alcohol.

Youth have also been shown to be differentially attracted to the locations and timing of alcohol advertisements. Alcohol ads are frequently located on billboards, signs on buses, posters in public venues, magazines, and television (Martin et al., 2002; Wyllie et al., 1998), with many ads for beer and distilled spirits being found in magazines popular among youth (e.g., *Sports Illustrated*, *Rolling Stone*, *Entertainment Weekly*, *Newsweek*, and *Playboy*). Finally, Wyllie and associates reported that the timing and placement of televised alcohol ads is important with youth recalling many television ads for alcohol aired during sports events, and on late night TV programs popular among youth.

Tobacco Advertising and Youth

Research on the effects of tobacco advertising on youth is similarly abundant despite that smoking ads are no longer permitted on television and cigarette smoking is becoming less socially acceptable. Historically, these ads focused on presenting an *ideal image* (e.g., the Marlboro man) and/or indicating that individuals smoking is linked to an appealing lifestyle (Watson, Clarkson, Donovan, & Giles-Corti, 2003). Adolescents with low self-esteem were found to be particularly drawn to images of individuals who exhibit high

self-confidence (Santana, Gonzalez, Pinilla & Barber, 2003) As well, the images observed in tobacco advertisements present youth with a sense of independence (Pollay, 1996); a highly attractive concept for adolescents who are at a stage in their lives where they want to feel an enhanced sense of autonomy.

Another common theme found in tobacco ads is that of social approval (Wakefield, Flay, Nichter, & Giovino, 2003). A number of studies have demonstrated a major reason for adolescent smoking behavior is related to peer acceptance, and being a part of the 'cool crowd'. This concept is found across multiple sources of media images including films, television programs and magazines (Pollay, 2000; Santana et al., 2003; Watson et al., 2003). Early qualitative studies examined young individuals' perceptions of smoking in the media and found that adolescents believed smoking is a normal, everyday part of life. Historically it was perfectly normal to view individuals smoking in many public venues. Even today, are generally designated, acceptable smoking areas (Watson et al., 2003). Finally, Pucci and Siegal's (1999) research on brand initiation reveals that ads for specific cigarette brands influence the type of brands young individuals choose to smoke whether they are initiating, or have already started to smoke. Tobacco ads influence young individuals as the cigarette brands most frequently smoked are those most frequently advertised (Pollay, 2000).

Gambling Advertising

Numerous gambling advertisements portray gambling as a glamorous lifestyle, filled with excitement and promoting a sense of fantasy. These images can lure individuals by convincing them that a glamorous lifestyle is easily achieved in different gambling venues. Current research on the effects of gambling advertisements is scarce, as few researchers have examined gambling advertising and its effect on the general population (Griffiths, 2003). Even less research exists on the impact of gambling advertising on youth behaviors and attitudes towards gambling.

Gambling advertisements contain various characteristics depending on the type of gambling activity (i.e., lottery, casinos, sports betting, etc.), or the type of medium employed (i.e., television, Internet, radio, etc.). Advertisements predominantly use two types of characteristics; these being situational and structural characteristics (Griffiths, 2003). Situational characteristics refer to the environment in which gambling venues are located, the number of sites, and the organization of the advertising campaigns. Situational characteristics highlight the glamour, glitz, and often surreal environment of the gambling venue. These are typically included in casino and Internet advertisements. In contrast, structural characteristics place a greater emphasis on the physical structures inherent in the game (e.g., flashing lights and bright colors on slot machines).

Researchers also report that gambling advertisements appear in a multiple of media formats with each one reinforcing the other, which can also influence young viewers in different ways. Felsher and colleagues (2004), studying adolescent lottery ticket purchases, reported that the majority of adolescents reported viewing lottery

advertisements, with most advertisements being recalled through television (90%), billboards (69%), newspapers (68%), and magazines (55%). As well, a large number of adolescents reported viewing tickets at the check-out counters of local convenience stores. Overall, 39% of adolescents who reported seeing any of the ads admitted they would be more likely to purchase a ticket after viewing. Developmental differences in reactions and preferences for types of lottery ads suggested that older adolescents (age 15-17) reported seeing most ads on television most often, while younger adolescents reported viewing lottery ads primarily in newspapers.

In addition to television, billboards, newspapers and magazines, the Internet is an important medium for gambling advertisements. The Internet is currently one of the fastest growing media sources, particularly for advertising (Chandon & Chtourou, 2005; Faber, Lee, & Nan, 2004; Rose, 2001). Pop-ups and banner ads are increasingly common (Faber et al., 2004; Griffiths, 2003). Griffiths (2003) has suggested that online gambling ads likely increases gambling, especially among males.

Gambling Advertising and Youth

A qualitative study, using focus groups, was recently conducted by Korn and his colleagues (2005) where the intent was to examine the potential impact of commercial gambling advertising on youth knowledge, attitudes, beliefs and behavioral intentions towards gambling. Prior to the focus groups, Korn and his colleagues had experts perform a content analysis of gambling advertisements for casinos, lotteries, and horse racing. They analyzed and categorized 479 gambling ads according to the Gaming Control Act Guidelines, the ads' main messages, and its tone and style. These ads were developed and promoted by the Ontario Lottery and Gaming Corporation, Casino Windsor, Casino Rama, Casino Niagara and Charity Casino's Woodbine Entertainment. Within each of these organizations, the ads were further categorized according to the medium used (e.g., print, television, and radio).

Korn et al.'s (2005) focus groups consisted of 63 adolescent participants aged 13 to 17. In total there were eight focus groups; four groups consisted of 13 – 14 year olds and the remaining four groups consisted of 15 – 17 year olds. All focus groups took place in a formal setting and lasted approximately 90 minutes. Korn et al. reported that all the adolescents were familiar with gambling and that gambling has been a part of their life experiences through their peers, family and community.

Characteristics common to all the gambling ads were determined from the content analysis, based upon the messages presented and the style of the ads. The central messages presented equally among all three types of media of ads were that gambling is entertaining and exciting, gambling is a form of escapism, and that anyone can win. The message of 'winning big' was found primarily in lottery ads. Using a male voice-over and bold, flashy colours were equally used in all three types of ads. Humour was found to be used primarily in the lottery ads. Finally, the casino and lottery ads promoted anti-establishment or anti-authoritarian messages.

From the focus groups, Korn and his colleagues initially determined that virtually all of the participants partake in some form of gambling activity which included sports betting, wagering among friends, card playing, dice, quarter-tossing, lotteries, scratch tickets, bingo, and raffles. Participants' overall belief was that gambling is normal, reasonable and fun. Subsequently, some of the underlying motivations of youths who gamble were discussed. Youth reported being motivated to gamble because they believed gambling was fun and exciting, there could be financial gain and lifestyle or status attainment, and that gambling was a form of socializing. In addition, some adolescents admitted that peer pressure was a reason why youth may gamble (see Derevensky, in press for a more comprehensive discussion of reasons reported for gambling).

Following their motivations for gambling, youth perceptions of and attitudes towards gambling advertisements were examined. Similar to the experts' content analysis of inherent messages in the ads, adolescents reported that the messages they perceived are that gambling is enjoyable and entertaining, it is easy to win, anyone can win, gambling is rewarding and can be life-changing, and that gambling benefits society. Multiple groups were identified as targets of the advertisements based upon their age, gender, and SES.

Common Themes in Gambling, Alcohol and Tobacco Advertising

After reviewing the abundant literature on alcohol and tobacco advertising and youth, as well as the scant but existing literature on gambling advertisements and youth, a number of common themes and characteristics seem to emerge. Such themes include the notion of fantasy/escape, financial rewards, social advancement and being part of the 'cool, in-crowd', entertainment, attractive sexually provocative females are common, a glamorous/exciting lifestyle can be attained, and the desirability of independence.

Both alcohol and tobacco advertisements have been shown to considerably affect adolescents' smoking and drinking behaviors, attitudes, and intentions. Research into gambling advertisements' potential effect on youth is necessary to uncover the possible parallels and differences with alcohol and tobacco ads. It will be useful to determine specific characteristics (both structural and situational) of gambling advertisements that appeal to youth, and to question adolescents directly about their attitudes towards such ads. In addition, the messages that youth receive from gambling advertisements is equally important to consider. As such advertisements may promote initiation of gambling and/or maintenance of gambling. Finally, is there is a bidirectional relationship between gambling advertisements and severity of gambling problems?

PHASE 1 METHODOLOGY

Phase I is the qualitative portion of the larger study on adolescent perceptions of the impact of gambling advertisements on their behavior. This phase was accomplished by conducting multiple focus groups with high school students; their responses were recorded, transcribed and analyzed.

Epistemological Assumptions

The rationale and purpose of Phase I incorporates the application of positivist (objective) and constructivist (grounded theory) interpretive frameworks (Charmaz, 2002, 2004; Guba & Lincoln, 2004). Assumptions relevant to this study from the positivist framework entail that themes are present within existing gambling advertisements. This study is also of grounded theory in nature; therefore, themes that emerge and are generated from the advertisements, based upon the adolescents' perceptions, were analyzed.

The focus group methodology was initially used for two reasons. The first was that an exploratory approach was deemed necessary to understand the impact of the characteristics of the gambling advertisements and to look for emerging themes. Gender and developmental differences are also of importance. As well, information obtained from focus groups is rich and descriptive and thus provided a means to generate hypotheses for further exploration. Second, focus groups were used to compare gambling advertisements with tobacco and alcohol advertisements. Drawing parallels with knowledge acquired from the literature on the effects of tobacco and alcohol advertising on youth provided a useful framework. Next, it was necessary to explore whether adolescents are aware of gambling advertisements, hence participants discussed gambling advertisements they recalled. This was accomplished by asking the students open-ended questions regarding their awareness of gambling advertisements and where they have noticed them.

In addition to determining adolescents' exposure to gambling advertisements, the focus groups included five other goals to assist in determining the impact of advertisements. Adolescents were asked what they liked and disliked about the advertisements, they were asked to describe positive and negative features of the gambling advertisements, what was the message adolescents received, who adolescents believed were targeted, and if they believed themselves and their peers are influenced by the advertisements.

Context of Study

Researchers from the International Centre for Youth Gambling Problems and High-Risk Behaviors (YGI Centre) conducted focus groups in multiple high schools in Quebec and Ontario. The goal was to create an atmosphere where the students were comfortable to discuss issues amongst themselves. A tape recorder was placed on the floor in the middle of a circle of chairs to tape student responses. Students were made aware of the recorder's presence during the informed consent procedures.

In addition to the placement of the tape recorder, it was necessary to minimize the power differential between researcher and research participants (Eder & Fingerson, 2002). Thus, the chairs were strategically placed uniformly in a circle, without having a ‘head’ chair for the moderator. Finally, a note taker was deliberately placed outside the group. The rationale for this approach was to minimize the impact of student observations and to create a natural setting to facilitate conversation.

Participants

Participants consisted of 143 adolescents (75 males; 68 females) from high schools (see Table 1 for the distribution of students by age and gender). All students participated in the groups voluntarily and informed consent was obtained from both parents and students. During this phase 26 focus groups consisting of 6-8 children/adolescents per group (2 focus groups per grade level; 7, 8, 9, 10, 11, 12) were conducted.

Table 1: Participant Distribution by Age and Gender (Phase I)

Participant distribution			
Age	Male	Female	Total
12	11	13	24
13	20	12	32
14	12	10	22
15	11	9	20
16	7	10	17
17	10	9	19
18	3	5	8
19	1	0	1
Total	74	68	143

Development of Focus Group Guide

A moderator guide was developed to be used during the focus groups (see Appendix A). This process began with initial brainstorming of ideas and questions about gambling advertisements in line with the research questions and objectives. Next, the questions were categorized according to the goals outlined above. Once the ideas and questions were categorized, they were worded as open-ended questions to ensure participants discussed their recollections, as opposed to being prompted. The primary objectives addressed in the focus groups determined adolescent perceptions of print, radio, television, billboard and Internet advertisements, and whether they perceive such ads to impact themselves or their same-age peers. To address these objectives from a youth

perspective, the following questions were included in the development of the focus group guide:

- 1) How much gambling advertising is there?
- 2) How much, or which, gambling advertisements are adolescents/young adults aware of?
- 3) What is the relationship between self-reported exposure to gambling advertisements, perceived risks and benefits, and reported gambling attitudes and behavior?
- 4) Do gambling advertisements result in increased gambling or does gambling result in increased awareness of gambling advertisements?
- 5) What gambling messages and media (based upon structural characteristics) are more attractive to adolescents and young adults?
- 6) Are these the same mechanisms, or tactics, that reportedly work for adults?

Prior to discussing gambling advertisements, it was important to ascertain the adolescents' definition of gambling, which gambling activities they engage in, their frequency, and if they think their peers also engage in such activities. This was accomplished at the start of each focus group by asking which gambling activities do they emerge in (i.e., scratch cards, lottery, poker, dice, sports betting, Internet gambling, etc.). The final version of the guide consisted of open-ended questions that would initiate a directed discussion between moderator and among participants. The questions were divided into three sections; gambling in general, exposure and characteristics of gambling advertisements, and the impact of gambling advertisements. Each section was allocated a specified time to assist the moderator. The gambling, exposure, and impact sections were allotted approximately 10, 15, and 20 minute segments respectively, for a total time of approximately 45 minutes.

Contacting the Schools

Initial contact was made with the schools once the larger study had received ethical approval. Information explaining the study was sent to school boards and private schools in Quebec (Montreal) and Ontario (Ottawa and Toronto). In total, 26 focus groups were conducted (7 in Montreal; 19 in the Ontario region). When a school board agreed to allow their schools to participate, individual principals were contacted to schedule focus groups and consent forms were distributed.

Conducting the Focus Groups

All focus groups were conducted in English. Before the groups were initiated, a senior staff member at the YGI Centre provided training on how to act as both moderator and

note-taker. The role of the moderator was to facilitate the discussion by ensuring each student's participation, and maintaining the focus of the discussion as per the topics outlined in the guide. In addition, it was equally important that the moderator remain impartial and unbiased to the information.

The role of the note-taker was to remain unobtrusive to the students, to record students' comments, to note non-verbal expressions and behavioral observations, and describe anything unique that occurred during the focus group (e.g., long silences or pauses in the discussion). The note-taker explained his/her role and the moderator's role to the students prior to beginning the discussion. The note-taker also had the role of introducing the topic and setting ground rules for the discussion before it began. A protocol was developed for the note-taker to use when giving the introductory remarks (Appendix B). A primary purpose of this introduction was to emphasize to the students that everything discussed in the room was confidential. Emphasis was also placed on how there were no right or wrong answers, as obtaining their honest views and opinions was necessary.

Transcribing and Coding of the Data

The focus groups were recorded on digital tape recorders with the exception of the first three, which were done with a standard audio tape recorder. Upon completion of the focus groups, research assistants transcribed the discourse of the groups. Next the transcripts were verified. Verification of the transcripts consisted of approximately 15% of the groups being read through by a senior researcher; resulting in about 1 in every 6 focus group transcripts being verified. Lastly, the transcripts were prepared for data analysis. This was done by coding all the student responses according to their gender and age and then categorizing the responses according to the six primary goals.

Data Analysis

The qualitative data analysis consisted of a review of the transcripts to identify major themes and sub-themes. This was accomplished by identifying key words, phrases, and/or sentences that typify or identify a theme. A theme is considered typical if several individuals within the focus group noted or repeated the same theme, word, or phrase; if several people from different focus groups repeated the same word or comment; or if someone in the group made a statement and a substantial number of others agreed. The data was organized according to the major themes articulated. The participants' responses were then examined by each of these themes, and then typical quotes and key ideas were highlighted to identify the sub-themes within each major theme. Next, individual participants' responses were coded and identified as being part of a sub-theme based on such quotes and key ideas.

The analysis then consisted of calculating the frequency of responses. Within a given sub-theme, the number of responses were added, and then divided by the total number of responses from all the themes within that major theme, and multiplied by one hundred to obtain a percentage. For example, the first major theme describes adolescents' exposure to gambling advertisements. There were 194 responses for this theme from across all the

focus groups, and 73 of these responses related specifically to lottery ads. This resulted in 37.6% of participants' responses reporting lottery ads as a type of gambling advertisement observed.

The data analysis resulted in the emergence of five general themes, each with respective sub-themes that will be described. Participants discussed their perceived exposure to advertisements for different forms of gambling as well as for the different types of media in which they encounter such ads. Additionally, the adolescents discussed their perceived characteristics within gambling ads, what messages they perceived, who they believed gambling ads are targeting, and whether they perceived themselves or others as influenced by gambling advertisements.

RESULTS

Theme I: Exposure to gambling advertisements

Gambling advertisements expose adolescents to various forms of gambling activities. Lottery advertisements, in Quebec and Ontario, were the most prominent type of gambling advertisements viewed by youth, with more than a third (37.6%) of participants' responses reported seeing them in all the focus groups. Lottery ads were noticed in all types of media, especially those found on television and the radio. In fact, some adolescents were familiar with specific tunes associated with the lottery advertisements they heard on the radio. As well, many of the participants cited various television commercials featuring individuals who won the lottery and used their newfound wealth on extravagant purchases.

“[In a] *Lotto 6/49* [ad] there was that guy driving around that big mansion in a golf cart” – female, 17.

Following lottery advertisements, approximately a quarter (23.7%) of participant responses reported exposure to casino advertisements. Casino ads were most frequently seen on billboards (specifically for the *Casino de Montréal*), television and the Internet (in the form of pop-up ads for online casinos).

“Driving on the highway, you see big seductive billboards – people are bathing or it is like a casino, so it's dragging you in” – male, 13.

Adolescents also stated that they saw advertisements for television shows that feature some form of gambling. In particular, adolescents either watch, or have seen commercials for the show *Las Vegas*, a popular fictional drama that takes place in Las Vegas casinos. In addition, several sitcoms including *The Simpsons* were also noted to occasionally have gambling-related episodes. Lastly, television programs that feature live poker games and tournaments with celebrities playing were cited as a form of poker advertising on television. Adolescents admitted they found it enjoyable to watch the poker tournaments

and several participants stated they learned poker ‘tricks’(strategies) from this type of program.

Poker ads while viewed on television were primarily seen on the Internet for online poker (in the form of pop-ups similar to the online casinos). Additionally, adolescents were exposed to ads for *Texas Hold’em*, as this was something articulated across the majority of the focus groups.

Adolescents also discussed their exposure to scratch tickets. They reported that scratch tickets on display in convenience stores at the front counters were considered to be a form of gambling advertisement as it was something they did not often consider purchasing until viewing them when paying for other purchases. In particular, adolescents were aware of bingo scratch cards.

A small number of adolescents revealed having seen ads for slot machines. Ads for slot machines are different than the ads for casinos as they sometimes focus only on the type of game the slot machine offers, rather than the wide variety of games offered at a casino. Additionally, slot machines, similar to casinos and poker, can be played online therefore Internet pop-up ads also exist for such gambling.

Interestingly, a few adolescents reported ads that feature winning a prize or contest for a specific product, (e.g., such as coffee or chips - *Tim Horton’s Roll Up the Rim* contest). These youth perceive such contests to be a form of gambling as they noted that they sometimes purchase *Tim Horton’s* coffee just to have the chance to win a large prize.

“I buy that coffee just to try and win. Even the chip bags and bottles of Coke have contests” – female, 18.

Types of media

In addition to the different forms of gambling activities that youth are exposed to through the advertising, participants discussed their exposure to gambling advertisements through various types of media. Among the different media, the Internet was most commonly cited by participants. Almost every participant had observed pop-ups that lead to online casinos, poker games, or other types of games where a prize was involved for playing a game or purchasing a product. As well, some adolescents reported that they receive frequent emails related to gambling promotions which either advertised trips to Las Vegas, or highlighted prizes to be won.

“The biggest pop-ups that exist are about casinos” – male, 16.

“Yeah, there’s always pop-ups for casinos and casino online” – male, 17.

“I get e-mails all the time, ‘Win a trip to Las Vegas’, you open it, and it says pay this much and you can win a trip and you waste more money” – female, 16.

Television was the second most commonly cited medium of advertising after the Internet. The majority of advertisements seen on television were for the lottery, depicting individuals who had won large sums of money. As well, participants reported that these types of ads usually employ humour as a method to attract individuals. Additionally, participants generally admitted to spending a large amount of their time watching television after school and in the evening, hence it intuitively makes sense that they be exposed to a large amount of gambling ads through television.

Following television, billboards were also frequently cited as a type of medium used to advertise gambling products and activities. Participants described billboards as signs seen along the highway or roads, posters in the subway/metro or city bus booths, as well as advertisements on the side of buses. One adolescent suggested that the billboard is large and therefore the idea of winning big is equally large.

“Sometimes you are walking and you see a sign bigger than you are, advertising something like [winning] 30 million dollars” – male, 16.

Store displays, radio, magazines and newspapers were other forms of media cited that are used for gambling advertisements. However, youth reported these media less frequently than the Internet, TV and billboards. Store window displays were considered a form of advertising as adolescents acknowledged that when they walk into a corner store, they see signs that advertise the jackpot or scratch card. Additionally, participants suggested that store counter displays promoting scratch tickets may entice adolescents to purchase them. This notion is evidenced by some of the participants who commented that they often do not plan to purchase scratch tickets, however when they reach the counter to pay for a purchase, they become tempted to spend an extra couple of dollars on them.

“When you walk in stores you see 10 million dollars this week and you say, ‘oh I wanna play’” – male, 17.

“At the corner store I’ve seen flyers and advertisements to try and get you to buy a Bingo ticket” – female, 16.

Radio advertisements were discussed by a small number of participants. The primary attributes of radio ads involved the sounds of laughter and individuals having fun at a casino. Hence, it seems radio ads, similar to other advertising media, appeal to youth through such sounds that portray the notion of individuals having fun.

Finally, participants noticed magazine and newspaper advertisements less often than any of the aforementioned types of media. The primary reason stated for this was that these participants do not read the newspaper or magazines as often as they surf the Internet and watch television.

Theme II: Characteristics of gambling advertisements

Gambling corporations use a variety of identifiable features in their advertisements for promoting gambling services and products. Features consist of the physical characteristics within advertisements that surround them, or are part of the advertised product or gambling venue. Several sub-themes emerged regarding these features which included the specific structural and situational characteristics, and the characteristics participants preferred. As well, the characteristics that participants disliked were addressed.

Structural characteristics

Structural characteristics are features particular to the form of gambling and serve as a reinforcement of gambling behaviors (Griffiths, 1993). The primary structural characteristics participants perceived in these advertisements were the bright, flashy colours frequently seen in gambling ads and the propensity for gambling ads to be 'catchy' or contain a considerable amount of movement. These types of features are commonly observed on Internet pop-up ads (e.g., for casinos) in the form of a flashing banner. Another characteristic is the inclusion of the use of dollar signs typically embedded on the gambling product itself (e.g., lottery scratch tickets).

Situational characteristics

Situational characteristics include features designed to promote and lure individuals to initiate or maintain their gambling. They primarily consist of environmental features that are part of the advertisement. Participants perceived a greater variety of situational versus structural characteristics in gambling advertisements. One such situational characteristic includes the portrayal of young individuals as happy and enjoying themselves. In fact, 21% of participants reported individuals enjoying themselves as an important situational characteristic. Participants suggested that individuals are typically portrayed as happy in gambling ads as they almost always feature winners of the lottery and/or other gambling-related games.

Another situational characteristic noted was the large sums of money and dollar signs featured in some gambling advertisements. Dollar signs were previously described as a structural characteristic, however, they can also be considered a situational characteristic dependant upon how they are used and interpreted in the advertisement (Griffiths, personal communication). For example, one participant pointed out that dollar signs are sometimes observed as part of an ad for visiting casinos in Las Vegas. This is different than dollar signs used as a structural characteristic on lottery tickets and scratch cards because in the *Las Vegas* ads, the dollar signs are displayed to entice individuals to play; therefore the dollar signs are now a feature involved in the initiation of gambling behavior.

Finally, there were several other less prominent characteristics which emerged from the focus groups. Humour, a common feature in TV ads, was viewed as a means to encourage an individual's interest in gambling. As well, using attractive, sexually

provocative females to promote gambling activities was observed. Males in particular commented on the use of attractive females, however, there was one female participant who reported the ads frequently feature “beautiful people.” Attractive females are commonly portrayed on billboards that advertise casinos, on TV, and on Internet sites. Lastly, participants viewed the ads as exciting, stimulating and glamorous; reflecting the idea that gambling can lead to attaining such excitement in an individual’s life. Speculation had occurred prior to the focus groups that the use of celebrities in gambling advertisements would be a characteristic readily detected. The media generally portrays celebrities as living glamorous, exciting lifestyles. However, only two adolescents (2% of the given responses) cited the use of celebrities as a way of enticing them to gamble.

Attractive features of gambling advertisements

In general, a third of participants’ responses revealed that the notion of winning lots of money was a feature of the ads they most enjoyed. Adolescents explained that winning lots of money is exciting as the money can be used to purchase extravagant items that can change their lifestyle.

“There’s something that always makes me think of the “Cash for Life” (a popular scratch ticket) and how your property can be so much bigger and everything could be so much better and how much better your life could be” – female, 16.

The bright, flashy colours commonly observed in gambling ads appealed to a large portion of participants as the colours make the ads noticeable and physically attractive. As well, participants described the bright colours as stimulating and entertaining. The portrayal of individuals’ enjoyment in the ads was a feature participants particularly found appealing.

“People in the ads sound like they are having a lot of fun, if you’re not having a good day, you will want to see the ad” – female, 12.

Following these attributes, adolescents’ reported to a lesser extent that the characteristics they liked were attractive females, humour, and ads that were “eye-catching.” Participants revealed that ads featuring attractive females are appealing because they entice young people and in general increase the anticipation and excitement of going to a casino. The humorous ads are appreciated because they are funny and entertaining to watch. Adolescents also described their preference for “eye-catching” ads because the animation in those ads maintains their attention and interest. Finally, participants discussed how they enjoyed the glamorous aspect of the ads and the use of celebrities.

Unattractive features of gambling advertisements

The following subtheme discusses those features of gambling advertisements participants disliked. The purpose in ascertaining this information was to identify characteristics or elements of gambling advertisements adolescents find unappealing and why they judged

them as such. For example, do they dislike certain aspects of the ads because they do not appeal to their age group or because the ad does not appeal to any individual in general? The most prominent idea to emerge was that the repetition of ads are considered annoying. This notion re-occurred in all the focus groups and most participants agreed. Adolescents suggested that the ads are considered annoying in part because of their abundance and widespread proliferation and in part because they do not portray realistic possibilities. Additionally, several adolescents commented that the pop-ups on the Internet are annoying as they interfere with other activities and thus they always have to close them.

“The pop ups are annoying. You’re closing them and they keep popping up while you are trying to do other things” – male, 17.

The second most relevant suggestion raised was the deception they felt was inherent in some ads. Specifically, participants described feeling discontent with ads that did not explain the negative consequences of gambling, as well as the true probability of winning or losing. Finally, the last key idea to emerge that adolescents do not like was that the ads portray individuals gambling as excessively happy. Participants suggested that this results in the ads portraying an underlying message that money (attained easily from gambling) will make an individual happy. This concept stems from the fact that individuals are never portrayed as losing anything, hence they are unrealistically happy.

“The ads are fake, people aren’t ever that happy,” – female, 12.

“They’re kind of implying that getting all this stuff with this money is going to change your life, and not just change your life but change you with it. A poor person and a rich person can be equally sad or equally happy; it just depends on the person,” – female, 17.

In addition to the unattractive characteristics of gambling ads, a subset of participants discussed other ideas worth noting regarding aspects of the ads they dislike. Some adolescents did not like the effect gambling advertisements have on them as the ads are sometimes present in their minds, even when they are not observing them. One adolescent described this concept as “getting into your subconscious”. Another group of participants reported their experience of gambling advertisements to be boring, therefore demonstrating their dislike. Finally, a small number of participants specifically stated that they dislike the underlying inherent message portrayed in many gambling ads that suggest that money equals happiness.

Theme III: Messages perceived in gambling advertisements

Another important theme to emerge from the focus group discussions was the underlying perceived messages. The most common message perceived is that gambling leads to winning; hence gambling leads to easy access to money. Approximately 40% of participant responses supported this message. A smaller number of adolescents additionally noted that they perceived the ads as simply trying to persuade them to

purchase the product; whether the product is a lottery ticket or a chance to play a game with prizes involved.

Finally, participants also commonly perceived the message that an individual's life will change for the better as a result of gambling. Given that adolescents perceived the message that gambling can lead to the attainment of great wealth and extravagant purchases as a feature of gambling advertisements, it is not surprising that participants believed an underlying message in the ads to be that an individual's life will be better as a result of gambling (one recent slogan from a lottery company was *"It doesn't change you but..."*). In addition, participants suggested that the ads positively portray this message as a strong possibility that can be realized without exerting much effort. A few participants described TV ads that depict individuals who quit their jobs as a result of winning the lottery.

Theme IV: Target audiences of gambling advertisements

Participants suggested that multiple age groups and social status groups are a target of gambling ads. In essence they report that advertisers do not discriminate between rich or poor, age, gender or ethnicity.

A third of the participants perceived themselves, underage adolescents, as the primary target of the ads. A subset of participants further elaborated that ads target underage adolescents to ensure their future participation in gambling activities.

"They try and grab us when we're young, so that when we turn 19 we'll go straight to the casinos" – female, 17.

In contrast, another 29% of adolescents reportedly believe ads target older individuals who are of legal age to gamble (those in their thirties and above). Some of these participants specifically stated that the ads are aimed at the elderly population, as they reported that gambling ads have a tendency to depict elderly individuals playing the slot machines in casinos. Finally, young adults in their twenties, who have just reached the legal age to gamble and do not have a lot of money, were specifically identified as a target group by a significant portion (22%) of participants.

Participant perceptions of whom the ads target range from underage adolescents, to younger and older adults of legal age. Such perceptions varied depending upon the advertisement being discussed. For example, when discussing ads that portray older individuals in casinos, the perception emerged that ads target an elderly population. Another example is when discussing the TV ads that portray younger adults who have quit their job, gone on vacation, or made expensive purchases, the perception emerged that ads target younger adults. A final example is the ads that depict individuals who enjoy gambling are targeting adolescents.

In addition to different age groups, the group discussions revealed that adolescents perceive individuals of all social status to be primary targets of gambling advertisements. Participants believed that the ads target ‘average’ individuals; average representing individuals who are neither wealthy nor poor. In contrast, some participants reported their belief that the ads target middle to upper-class individuals because these individuals are wealthier. Hence, participants suggested that middle to upper-class individuals have more discretionary money that they can use for gambling activities and products. Lastly, a few of adolescents discussed two other types of individuals who they perceive as targets of gambling advertisements. First, several participants suggested that the ads specifically target low-income individuals; hence the notion of attaining great wealth as a prominent feature in gambling ads. Second, a limited number of participants believed that ads specifically target men; thus the use of attractive females is a notable characteristic.

Theme V: Influence/impact of gambling advertisements

This theme consists of the influential effects participants perceive in gambling advertisements. Adolescents discussed whether they believe that gambling advertisements influence them or other individuals, what kind of effect they perceive the ads to have, and their general overall perception after exposure to such ads.

Thirty six percent of participants believed they were significantly influenced by gambling advertisements. Issues raised by these adolescents were that they have plans to purchase lottery tickets when they reach the legal age, they frequently think about ads after viewing them, and that ads sometimes create a desire to gamble.

“The ads do get in your head” – female, 13.

“Makes you think about what you can get” – male, 14.

“Yes, after I see something so many times I believe it” – female, 14.

“Yeah, they are the normal ads that sometimes you disregard and others you feel slightly inclined to gamble” – male, 15.

In contrast, a similar proportion of participants’ responses (31%) reported that they do not believe they are influenced by ads. These adolescents suggested that they are not interested in the ads, they have been educated not to believe advertisements in general, and finally, how their awareness of the odds of winning when gambling does not allow them to be positively influenced by such ads.

“I see them but those things don’t really have an effect on me. The chances of winning are like one in a billion” – female, 15.

“Not at all, I get annoyed” – male, 15.

“I ignore them and do not find them interesting” – male, 17.

“The way I was raised at home is that advertising doesn’t really change my opinion” – female, 17.

Still further, a quarter of participants’ responses revealed that their peers are generally immune to the lures of gambling advertisements. One adolescent in particular commented upon the great similarity between gambling, cigarettes and alcohol advertisements. Nevertheless, participants expressed their belief that some individuals are more easily influenced than others. Participants suggested that these individual differences are often dependent upon an individual’s level of knowledge and expertise of different gambling games and individual personality characteristics.

Gender Differences

A number of gender differences emerged that differentiated male and female participants.. As part of the gender trends analysis, frequency percentages were again calculated for each sub-theme within each major theme for both males and females separately.

Exposure to advertisements for different forms of gambling activities resulted in the emergence of three minor gender trends. The trends are considered minor as there was an (approximately 5% difference in frequency percentages between male and female responses). First, males reported slightly more exposure to poker advertisements than females. Second, females reported more exposure to contests as advertisements than males. Lastly, females also more often reported viewing television shows that portray gambling than males. Both males and females equally reported perceiving Internet, TV and billboard ads for gambling, as these are the most prominent types of media used for such advertising. However, perceived exposure to store displays resulted in a minor (4.7%) difference between males and females, as males discussed such exposure more frequently than females. This difference is logical considering more males reported greater exposure to scratch tickets than females and scratch tickets are typically bought where they are displayed on the counter at convenience stores. However, what is not known is whether males have an increased tendency to frequent these stores more often, which could similarly explain their higher perceived exposure to this type of advertising.

Following exposure to gambling advertisements, gender trends emerged concerning participants’ perceptions of the characteristics of gambling advertisements. The single gender trend to emerge regarding structural characteristics was that approximately twice the number of males than females (35.7% vs. 18.8% of responses) reported bright, flashy colours. In contrast, gender trends to emerge regarding situational characteristics were that females more often reported the concept of individuals enjoying themselves and females primarily cited humour more frequently than males. However, and not surprisingly, more males than females reported attractive females.

As hypothesized, males more often cited attractive females as an appealing characteristic, and ads being ‘catchy’, containing ‘movement’, with bright, flashy colours were viewed

positively. Finally, and predictably, females cited individuals enjoying themselves as a feature they enjoy in gambling advertisements more than twice as often as the males. Based on these trends, it appears that males more often prefer the structural characteristics, while females tend to prefer the situational characteristics used in gambling advertisements.

Interesting gender trends emerged for which features of gambling advertisements participants disliked. Males primarily expressed their dislike that gambling ads are deceptive as they provide misleading information regarding the odds of winning or losing. Females cited the high frequency of gambling ads as highly disturbing. Finally, females believe these ads to be boring, while not a single male participant held such an opinion.

Developmental Trends

Participants were divided into three distinct developmental groups: Early adolescence (ages 12 – 13), middle adolescence (ages 14 – 16), and late adolescence (ages 17 – 19). Frequency of participants' responses was calculated for each of the age groups, as they were for the general themes and gender trends. The number of responses given by both the early and middle adolescent groups was approximately equal for each sub-theme, while the number of responses given by the early adolescent group was consistently higher. A developmental trend is indicative if a linear increase or decrease in the frequency of participant responses across the three age groups was observed.

Exposure to advertisements for different forms of gambling activities resulted in the emergence of three noteworthy developmental trends. First, exposure to poker advertisements were cited more by middle adolescents than younger and older adolescents. Second, exposure to casino ads was cited primarily by the younger and middle adolescents, however not by the older adolescents. Finally, exposure to contests as advertising, such as *Tim Horton's Roll Up the Rim Contest*, was primarily reported by the younger adolescents.

Adolescents' discussions of their exposure to gambling ads through various media formats also resulted in one developmental trend. Interestingly, exposure to TV ads decreased for older participants. This may be either because youths watch less TV as they age, or because older adolescents may watch different types of TV programs than younger ones, and the types of advertisements featured during such TV programs may be different.

Developmental trends emerged among participants' perceptions of which situational and structural characteristics are perceived in gambling advertisements, as well as the features they like and dislike in gambling ads. Among the structural characteristics, bright, flashy colours were cited most frequently by the younger and middle age adolescents, and less often by older adolescents. Among the situational characteristics, attractive females were cited as a prominent characteristic less frequently by late adolescent groups than their

younger counterparts (10%, 6.2% and 0% for each of the adolescent age groups respectively). Additionally, humour was cited primarily among the older adolescents as a characteristic within gambling ads.

Developmental trends for attractive features followed the same pattern as both the general themes and gender trends; preferred characteristics were similar to perceived characteristics. Bright, flashy colours were cited by both the early and middle adolescent groups as a preferred characteristic, however not for the older adolescents. In contrast, the older adolescents cited humour more frequently than the other developmental groups as a feature they enjoy in gambling ads. In sum, it appears that older adolescents prefer situational characteristics, while younger adolescents may prefer structural characteristics.

Interestingly, both young and middle-aged adolescents cited attractive females as an appealing feature of gambling ads, while none of the older adolescent stated as such. Lastly, although a minimal proportion of participants in general cited celebrities as a characteristic of gambling advertisements, those who did were solely from the youngest age group. The perception of underage adolescents as a primary target of gambling ads decreased through adolescence. Middle to upper-class individuals were perceived as targets primarily by the late adolescent age groups, as compared to the early and middle groups.

Older adolescents more readily admitted they are influenced by gambling advertisements than both the younger and middle adolescent age groups. In contrast, the younger adolescents primarily perceived that *other* adolescents are more likely influenced by gambling ads, in contrast to themselves.

PHASE II

Based upon data collected in Phase I, a survey instrument was developed to assess the impact of advertisements promoting gambling (see Appendices C and D). Self-reports for cognitive, affective and behavioral responses to gambling advertisements were acquired.

METHODOLOGY

Sample

The participants consisted of 1,147 adolescents from 5 secondary schools in Quebec and 3 secondary schools in Ontario. The distribution of students can be found in Table 2.

Instruments

Gambling Activities Questionnaire (GAQ) [Gupta & Derevensky, 1996]. The GAQ consists of 13 items and assesses four general domains related to gambling behavior: *Descriptive information* including prevalence and types of activities; *familial and peer gambling and substance abuse history*; *social networks*; and *academic achievement*.

Questions within each section domain are discrete, analyzed individually, and no cumulative scores are calculated.

Table 2: Description of Sample (Phase II)

	Males N	Females N	Total N
Grade 7-8 (ages 12-14)	125	95	220
Grade 9-10 (ages 14-16)	226	276	502
Grade 11-12 (ages 16-19)	224	201	425
Total	575	572	1147

DSM-IV-MR-J [Fisher, 2000]. This instrument is a revised version of the *DSM-IV-J* (Fisher, 1992) and includes 12-items (nine-categories) used to screen for pathological gambling during adolescence. The items are modeled after the *DSM-IV* (APA, 1994) criteria for diagnosis of adult pathological gambling. The revised *DSM-IV-J*, the *DSM-IV-MR-J* (MR = multiple response, J = juvenile), was developed for use with adolescents that have gambled during the past year. To compensate for the lack of opportunity for probing, most of the questions in the revised instrument have been given four response options: “never,” “once or twice,” “sometimes,” or “often.” The *DSM-IV-MR-J* represents a more conservative classification system of problem and pathological gambling groups in that various questions now require an endorsement above a certain severity level to receive a score of 1. Any score of four of the nine categories or greater is indicative of pathological gambling. The instrument assesses a number of important variables related to pathological gambling: progression and preoccupation, tolerance, withdrawal and loss of control, escape, chasing, lies, and deception, illegal activities and family or school disruption. The *DSM-IV-J* has been widely used by several researchers, and has been found to be the most conservative adolescent measure available of pathological gambling (Derevensky & Gupta, 2000a; Gupta & Derevensky, 1998a, 1998b; Volberg, 1998). Internal consistency reliability for this scale is adequate, with Cronbach’s $\alpha = .75$ (although slightly lower than .78 for the original *DSM-IV-J* screen) (Fisher, 2000).

The Effects of Gambling Advertising Questionnaire (EGAQ) (Derevensky, Gupta, & Messerlian, 2007) was developed specifically for this study following collating information from Phase I of the study. This questionnaire sought to ascertain information concerning the types and frequency of observed gambling advertisements, perceptions of the underlying messages, the qualities most influential, the perceived target of the advertisement, behavioral reactions to advertisements, the impact of advertisements and the ability to recall several advertising campaigns. This instrument was field tested, refined and takes approximately 15 minutes to complete.

Procedure

Data collection was organized around school location, schedule, convenience, and size and took place in a classroom, cafeteria, or library. In those schools where a large number of students agreed to participate, or where students were scattered in various classrooms, a large group administration was scheduled in the school's cafeteria or library. During this time, additional research assistants assisted in managing the large groups and ensured adequate supervision. Data collection was also carried out in individual classrooms during the homeroom period or throughout the day (according to administrators' specifications so as to create the least disruption possible).

Informed consent was obtained from parents and children prior to their participation. Consent forms were sent to participating schools and were distributed to the students through the school administration. Student participation was voluntary and individuals were able to terminate their participation at any time without consequences. Participating students completed the instruments in one fifty-minute period, taking approximately 20-30 minutes. No deceptive practices were included and participants were assured total anonymity and confidentiality. Moreover, teachers were requested to either leave the room or remain at the front of the classroom in order to respect participants' privacy.

All students were given the same general instructions prior to commencing the study. A trained researcher was present at all times to answer any questions and provide clarification if necessary. Questions were generally limited to word definitions and differed based upon participants' cognitive and developmental levels.

Data coding and entry. The data were coded and entered using a Fugitsu (Scan partner 620C) scanner and Optical Mark Recognition software (Remark Office OMR 5.5). This software recognizes optical marks (bubbles and checkboxes) and barcodes. Once the data were collected, completed questionnaires were scanned into the image scanner and subsequently saved as an SPSS 11.0 file set for analysis. This procedure has proven to have a very low data entry error rate.

RESULTS

Gambling Behavior

A relatively high rate of frequent and problematic gambling was reported (see Table 3). These youth report gambling at a young age, with almost one quarter of the sample first reporting gambling before reaching adolescence.

Consistent with the majority of previous studies, males were significantly more likely than females to report being frequent and problem gamblers. Almost one in five males reported gambling weekly, and more than one in four reported gambling-related problems (i.e., at-risk and probable pathological gamblers combined).

It is important to note that rates of gambling participation and associated problems vary considerably (see Derevensky, in press). Moreover, research has reported significant cultural (Ellenbogen, Gupta & Derevensky, 2007) and gender difference (Ellenbogen, Derevensky, & Gupta, 2007). Compared to other youth studies using a similar measure of gambling problems, the participation and problem gambling rates for the present study would fall on the upper end of the spectrum. This may possibly have been a result of a sampling bias and/or measures used. Further research is warranted, as it is important to determine whether this finding is indicative of an increase in gambling problems among youth or merely characteristic of this sample, methodological issues, or an increased number of venues and gambling opportunities (e.g., Internet wagering).

Table 3: Gambling Participation and Severity of Gambling Problems

	Percentage			
	Males	Females	Total	<i>p</i>
<u>Frequency of Participation</u>				.005
Gambles at least once a week	27	9	18	
Gambles 1-3 times a month	29	24	26	
Gambles less than once a month	24	38	31	
<u>Gambling Problem Severity</u>				.005
Non-Gamblers	20	30	25	
Social Gamblers	54	62	58	
At-Risk Gamblers	13	6	10	
Probable Pathological Gamblers	13	2	7	
<u>Age when started gambling</u>				.0005
11 years or younger	29	20	24	
12-15 years old	44	23	34	
16 years and older	3	5	4	
Never gambled	13	33	23	
Gambled but not for money	11	19	15	

Gender Differences

Overall, the most popular gambling activity reported was card playing (Table 4). Males were more likely than females to report being involved in sports or game-related wagering. Almost half of the males reported wagering on individual sporting events. Females tended to report purchasing more lottery scratch tickets, wagering on cards and playing bingo. The large percentage of females reporting card playing is a concern and a new and growing trend.

Despite efforts to stop the sale of provincially-sponsored gambling products to minors (e.g., the lottery), more than one-third of underage respondents report that they continue

to purchase scratch lottery tickets. The lure of these products that you can be an instant winner, the low cost to purchase a ticket, and its relatively easy availability makes this a popular activity for youth in spite of the legal prohibitions.

The results further suggest that both male and female adolescents are actively engaged in a wide number and diverse forms of both regulated and unregulated (informal gambling among peers).

Table 4: Gender Differences in Participation in Different Gambling Games

	Males %	Females %
Cards ***	69	44
Lottery	21	19
Scratch Tickets	33	39
Sports Lottery ***	22	6
Sports Betting ***	45	17
Sports Pools or Bowling***	34	11
Video Games for Money***	26	8
Video Lottery Terminals***	9	3
Casino Games***	15	4
Slot Machines	9	6
Bingo	22	29
Other***	16	8

*** $p < .0005$

Perceptions about Gambling and Gambling Advertisements

Males tended to hold more positive attitudes towards gambling (see Table 5). They were more likely than females to agree with statements suggesting that gambling is a fun, enjoyable and exciting activity, an escape from daily problems and stressors, as well as a good opportunity to socialize. Given their high level of agreement to such statements, it appears that that gambling has become an integral part the social lives of many male adolescents.

A majority of males and females think that gambling should be for adults only, and that gambling can become a problem. Nevertheless, adolescents view gambling as a socially acceptable form of entertainment and recreation.

Given their greater involvement in and acceptance of gambling, males would be expected to be more attracted to gambling advertisements. The results presented in Table 5 support this supposition; males were significantly more likely to report positive reactions to gambling ads, including being excited, want to try it, and looks like fun. Females were more likely to report negative reactions to ads, such as being bored, disinterested, and finding the ads annoying. Revealingly, a greater proportion of females believed that

Les effets de la publicité sur les attitudes et les comportements
de jeu des enfants et des adolescents
The effects of gambling advertisements on child and adolescent gambling attitudes and behaviors

gambling ads delivered messages like “your chances of winning are high,” and “winning is easy”, and felt that that they delivered unrealistic messages.

Table 5: Gender Differences in Perceptions About Gambling and Gambling Advertisements

	Percent in agreement with statement		
	males	females	<i>p</i>
<u>Gambling advertisements try to convince you that...</u>			
...you should buy this product	69	74	n.s
...winning is easy	64	72	.005
...gambling is fun	81	80	n.s
...your chance of winning are high	55	65	n.s
...gamble but know the risks	43	36	n.s
...gambling can make you rich	83	79	n.s
...gambling can relieve financial problems	46	47	n.s
...gambling is an escape from daily realities	46	42	n.s
...gambling is a form of entertainment	88	83	n.s
<u>Reaction to gambling advertisements</u>			
Excited	36	23	.005
Hopeful	33	32	n.s
I want to try it	47	38	.005
That could be me	47	38	.005
Annoyed	54	65	.005
Disinterested	54	65	.005
Unrealistic	59	73	.005
<u>Influence</u>			
Sometimes or often gambled after seeing an ad	11	3	.0005
Gambling advertisements increase my interest in gambling	27	25	n.s
I don't pay attention to gambling advertisements	64	70	n.s
Gambling advertisements increase awareness of products	66	65	n.s
<u>Attitudes towards gambling</u>			
Gambling should be for adults	60	78	.005
Gambling can become a problem	92	97	.005
Gambling is an escape from daily problems	30	17	.005
Gambling is a fun activity	70	51	.005
Gambling is a good way to socialize	50	34	.005
If I continue to gamble, my chances will improve	19	8	.005
Gambling is a good way to make money	31	15	.005

Les effets de la publicité sur les attitudes et les comportements
de jeu des enfants et des adolescents
The effects of gambling advertisements on child and adolescent gambling attitudes and behaviors

Table 6: Age Differences in Perceptions About Gambling and Gambling Advertisements

	Percent in agreement with statement			
	Grade 7-8	Grade 9-10	Grade 11-12	<i>p</i>
<u>Gambling ads try to convince you that...</u>				
...you should buy this product	61	74	74	.0005
...winning is easy	57	72	69	.0005
...gambling is fun	64	83	86	.0005
...your chance of winning are high	46	64	62	.0005
...gamble but know the risks	45	39	38	n.s.
...gambling can make you rich	71	83	84	.0005
...gambling can relieve financial problems	40	49	47	n.s
...gambling is an escape from daily realities	37	43	48	n.s
...gambling is a form of entertainment	70	89	89	.0005
<u>Reaction to gambling advertisements</u>				
Excited	22	24	41	.0005
Hopeful	21	27	45	.0005
I want to try it	31	37	55	.0005
That could be me	35	40	49	.005
Annoyed	71	62	52	.0005
Disinterested	67	65	50	.0005
Unrealistic	64	71	61	.005
<u>Influence</u>				
Sometimes or often gambled after seeing an ad	5	5	11	.005
Advertisements increase my interest in gambling	19	23	33	.0005
I don't pay attention to gambling advertisements	70	70	61	.005
advertisements increase awareness of products	55	65	72	.0005
<u>Attitudes towards gambling</u>				
Gambling should be for adults	80	69	37	.0005
Gambling can become a problem	97	97	91	.0005
Gambling is an escape from daily problems	20	23	25	n.s.
Gambling is a fun activity	34	62	72	.0005
Gambling is a good way to socialize	20	42	44	.0005
If I continue to gamble, my chances will improve	10	11	18	.005
Gambling is a good way to make money	16	19	28	.0005
Weekly Gambler	11	13	28	.0005
Problem Gambler	11	14	23	.0005

There were no gender differences in the degree to which the ads increased their awareness or interest in the gambling. However, more males than females admitted to gambling immediately after seeing an ad.

Developmental Differences

On the whole, older respondents reported more positive attitudes towards advertisements and gambling in general (Table 6). They were more likely to gamble after seeing an ad, and to perceive positive messages from gambling ads (e.g., “winning is easy” and “your chances of winning are high”). Interestingly, a higher percentage of older respondents held the erroneous belief that “if you continue to gamble, your chances of winning will improve.”

These findings are not likely due to younger people being more enlightened. The more plausible explanation would be that perceptions are altered or created so that they are consistent with behavior (see cognitive dissonance theory). As such, gamblers with an increasing habit may acquire new perceptions like being “due for a win” or “on a roll”.

The results suggest that gambling advertisements make more of an impact upon older adolescents. However, it must be noted that the long-term effects of gambling advertisements are a complex and multifaceted issue, and require much more in-depth analyses before definitive conclusions can be drawn. Nevertheless, gambling advertisements seem to be consistent with fun, excitement, high success rates (such ads always show winners), wealth and relief from financial problems, with a sizeable proportion of adolescents reporting it provides them with an escape from reality.

Youth with Gambling Problems

As represented in Table 7, problem gamblers held more favorable attitudes towards gambling than social and non-gamblers, and were more likely to hold erroneous beliefs, like “your chances improve if you gamble more.” Such beliefs may serve as catalysts for certain problematic behaviors, like returning to gambling to recover money lost the night before (called chasing losses). It is also plausible that such misconceptions render young people more vulnerable to advertising messages.

For the most part, problem gamblers perceived similar messages from gambling ads compared to social gamblers and non-gamblers (Table 7). There were a few notable exceptions. Problem gamblers were more likely to perceive a message that “gambling is fun, try it,” and think that ads encouraged people to “gamble, but know the risks” and to “gamble responsibly.” Clearly they perceive these ads as exciting, hopeful, with relatively few problem gamblers acknowledging being annoyed or disinterested when exposed to these ads.

Table 7: Perceptions About Gambling and Gambling Advertisements by Gambling Behavior

	Percent in agreement with statement			
	non gamblers	social gamblers	problem gamblers	<i>p</i>
<u>Gambling ads try to convince you that...</u>				
...you should buy this product	70	74	67	n.s.
...winning is easy	69	69	63	n.s.
...gambling is fun	75	82	88	.005
...your chance of winning are high	64	61	53	n.s.
...gamble but know the risks	34	39	52	.005
...gambling can make you rich	78	82	83	n.s.
...gambling can relieve financial problems	43	47	52	n.s.
...gambling is an escape from daily realities	41	43	51	n.s.
...gambling is a form of entertainment	83	86	87	n.s.
<u>Reaction to gambling advertisements</u>				
Excited	16	28	57	.005
Hopeful	22	32	51	.005
I want to try it	23	45	64	.005
That could be me	26	44	67	.005
Annoyed	73	59	42	.005
Disinterested	70	60	42	.005
Unrealistic	73	68	48	.005
<u>Influence</u>				
Sometimes or often gambled after seeing an ad	0	3	32	.005
Advertisements increase my interest in gambling	16	24	50	.005
I don't pay attention to gambling advertisements	77	67	49	.005
Advertisements increase awareness of products	66	65	70	n.s.
<u>Attitudes towards gambling</u>				
Gambling should be for adults	83	71	41	.005
Gambling can become a problem	96	97	85	.005
Gambling is an escape from daily problems	18	22	34	.005
Gambling is a fun activity	40	63	86	.005
Gambling is a good way to socialize	26	41	67	.005
If I continue to gamble, my chances will improve	6	10	34	.005
Gambling is a good way to make money	11	20	48	.005

At first glance, the finding that problem gamblers are more likely to think that gambling advertisements advocate responsible gambling seems counter intuitive. However, this is consistent with research on outcome expectancies. Like alcoholics and substance abusers,

problem gamblers are often aware of the risks associated with this behavior. However, they tend to minimize the extent of their problem and see no immediate threat to their well-being but rather view problems as something that will occur at a much later time (Gillespie, Derevensky & Gupta, 2007).

Overall, advertisements generated a greater response from youth with gambling problems. Compared to social and non-gamblers, problem gamblers were far more likely to report that gambling ads made them excited, hopeful, happy, eager to try, and think about winning. Moreover, they reported fewer negative reactions to gambling ads, like boredom, annoyance, and thinking they were unrealistic. Almost one-third of problem gamblers reported that ads made them more likely to gamble. Only 3% of social gamblers reported sometimes or often doing so.

One may question whether problem gamblers are more influenced by gambling advertisements because they receive more exposure. To test this hypothesis, non-parametric tests were used. Statistically significant Spearman Rank correlations were found between problem gambling severity and seeing ads on television, radio, billboards, newspapers, magazines, and spam e-mails. Most of the correlations remained significant (see Table 7), even when non-gamblers were eliminated from the comparison. A Kruskal-Wallis Test yielded identical results. The more severe the gambling problem, the greater the exposure to gambling ads. In particular, pathological gamblers reported seeing many TV and magazine ads, possibly reflecting differences in reading and television watching preferences.

Problem Gambling by Gender

To determine whether advertisements had a differential effect on male and female problem gamblers, the sample was divided by gender and separate comparisons between problem and non-problem gamblers were administered. For the most part, male and females with gambling problem were similarly different from their counterparts without gambling problems.

Finally, male and female problem gamblers were compared with respect to exposure to gambling ads. There was little evidence suggesting that males and females were differentially exposed to such solicitations.

Vulnerability to gambling advertisements

In order to identify the characteristics of youth who are likely to gamble after seeing ads, this question was recoded with youth reporting *sometimes*, *often* or *always* classified as vulnerable, and youth reporting *rarely* or *never* classified as not vulnerable. Compared to the non-vulnerable group, a number of demographic and gambling characteristics distinguished the vulnerable group. Seventy-nine percent was male ($\chi = 29$, $p < .0005$), and 57% were in grade 11 or 12 ($\chi = 13$, $p < .0005$). These youth held favorable attitudes towards gambling and gambling advertisements. One third of the group reported gambling gambled weekly.

Table 8: Association Between Problem Gambling Severity and Exposure to Ads

	Location of Advertisement	Problem gambling severity *	<i>p</i>	Problem gambling severity (minus non-gamblers)	<i>p</i>
Exposure to ads**	TV Show	.166	.000	.185	.000
	Radio	.096	.002	.093	.007
	Billboard	.125	.000	.063	n.s.
	Newspaper	.160	.000	.163	.000
	Magazine	.212	.000	.162	.000
	Internet Popup	.028	n.s.	-.029	n.s.
	Email Spam	.144	.000	.120	.001
	Convenience Store	.145	.000	.054	n.s.

* Severity was coded as: 1 = non-gambler, 2 = social gambler, 3 = at-risk gambler, 4 = PPG

** Exposure to ads seen was coded as: 1 = no ads, 2 = 1 to 3 ads, 3 = 4 to 6 ads, 5 = 7 to 9 ads, 6 = more than 10 ads

To ascertain whether problem gamblers identified as vulnerable are different from other problem gamblers, a series of post-hoc comparisons were effectuated. Among problem gamblers, those classified as vulnerable to advertising were more likely to be weekly gamblers (72% vs. 44%, $\chi = 13$, $p < .0005$). Further analysis revealed their increased participation extended to all types of gambling games. Finally, vulnerable problem gamblers were more liable to hold erroneous beliefs, such as “if you continue to gamble, your chances of winning will improve” (49% vs. 26%, $\chi = 10$, $p < .005$).

In order to ascertain whether vulnerability to advertisements was predictive of gambling problems after controlling for age, gender, and selected predictors (gambling frequency, erroneous beliefs about gambling), a stepwise logistic regression was performed. With the other correlates of gambling problems already entered in the model, the addition of vulnerability significantly improved the prediction model (improvement $\chi = 49.3$, $p < .0005$). In fact, the risk of having a gambling problem increased by a factor of 2.4 with every one-point increment on the vulnerability scale. Only gambling frequency proved a stronger predictor of problem gambling.

The propensity to gambling after seeing an advertisement (vulnerability) is a distinctive risk factor for gambling problems. Even after eliminating for the effect of variables strongly correlated to gambling problems, vulnerability helps to distinguish problem gamblers from social gamblers. Given what is already known of youth gambling problems and its positive relationship to impulsivity from prior research (see Derevensky, in press; Derevensky, Pratt, Hardoon, & Gupta, in press; Vitaro et al., 2004), vulnerability to advertising is likely similarly related to impulsivity. This trait has been linked to problem gambling for both adolescents and adults. Additional research is required to investigate the characteristics that render a person vulnerable to gambling advertising, and how to mitigate their increased risk for gambling problems.

DISCUSSION & CONCLUSIONS

The primary goal of this study was to determine the impact of gambling advertisements on adolescents through interpreting youth responses collected in both focus groups and through a general survey instrument. This study extends our current knowledge on the possible impact of commercial gambling advertising on youth's knowledge, attitudes, beliefs and behavioral intentions towards gambling.

Overall, similar themes emerged from both the focus group (qualitative component) and general survey (quantitative component) instrument. These themes were also consistent with Korn et al.'s focus group findings. Adolescents perceive gambling advertisements primary messages to be that gambling is fun, exciting, entertaining, and that you can easily become wealthy from gambling. Humour, bright and flashy colours, the use of celebrities, provocative females (often on Internet gambling sites) and glitz were prominent features of commercial gambling ads. This coupled with some recent findings that adolescents and young adults report gambling via the internet to relieve boredom (McBride, 2007) helps promote gambling.

Previous marketing and advertising research have reliably shown that repeated advertising of particular brands of products or types of products increases recall for that particular brand and/or product (Burke & Srull, 1989; Noel, 2006; Stout & Burda, 1989). Clearly, most adolescents are well aware of the advertisements promoting most forms of gambling. The general survey research also suggests that those most at risk for viewing advertisements (those likely to report a desire to gamble or actually gamble after seeing an ad) are those youth already experiencing some gambling-related problems (as measured by the DSM-IV-MR-J). The fact that these also report viewing provocative females on the ads, are at greatest risk for multiple addictive behaviors (Derevensky, in press), and frequently report gambling to escape and relieve boredom this is a problem. While the results suggest that these ads may not precipitate participation by non-gamblers, there remains little doubt about the reach of the exposure of such ads. Interestingly, several students reported that their belief in advertisements in general, with gambling ads included, is skeptical at best/. These youth report having been educated about the deception of advertisers aiming to target adolescents and young adults.

The findings revealed that youth observe ads for multiple forms of gambling activities including casinos, lotteries, poker, Internet, and scratch tickets. As well, youth are attracted to many different characteristics that they perceive in these gambling advertisements. Such characteristics include bright, flashy colours, the lifestyle depicted in ads of excitement and glamour, and dollar signs that indicate the potential for financial gain. Participants reported that these ads portray gambling as an entertaining, social activity, and that gambling serves as a potential means to a happier life filled with wealth. Participants, in general irrespective of their gambling behavior and severity of problems, noted that gambling ads often consist of bright, flashy colours and are sufficiently attractive to capture and maintain their attention. Some participants also expressed a

dislike for gambling ads due to the ubiquitous prevalence of ads on multiple media sources including television, the Internet and billboards. Youth discussed numerous messages contained within gambling ads and a variety of opinions emerged as to which individuals (age, gender, and SES) appear to be targeted and influenced by gambling ads.

The findings, in general, suggest that gambling advertisements likely constitute *one* important factor in determining youth participation in gambling activities. To better understand the nature of the relationship between youth gambling behavior and gambling advertising, it is useful to examine how the major themes that emerged in this study relate to reasons why youth report engaging in gambling activities. One reason youth often report gambling is that it provides ample opportunity for socializing (Derevensky, in press; Stinchfield & Winters, 1998). Jacobs (1986) contends in his *General Theory of Addictions* that one of the important factors as to why certain individuals develop an addiction rests in their underlying feelings of inadequacy, inferiority and a sense of rejection by parents and significant others. Gambling often helps to mediate such feelings by allowing individuals to forget their problems, while simultaneously enabling them to feel important and capable as society tends to revere risk-taking, thus eliciting positive attention from others. Many forms of gambling provide a venue for social interaction and social activities that can lead to the creation of friendships, and peer and/or family acceptance through participating in gambling activities (this is similarly true of Internet wagering even though the individual is really only interactive with his/her computer). Due to the ever-increasing variety and accessibility of gambling activities, youth are exposed to multiple gambling environment that provide a rewarding opportunity to socialize and interact with other individuals (Griffiths, 1999; Stinchfield & Winters, 1998). Gambling advertisements appear to target these issues directly, portraying social gatherings and social acceptance. This is also consistent with the finding that such environments relieve stress and boredom (McBride, 2007).

In addition to gambling being viewed as a means for social interaction, gambling has become widely accepted as a socially acceptable form of entertainment, owned, operated and often advertised by our governments (Azmier, 2000; Derevensky, Gupta, Hardoon, Dickson, & Deguire, 2003). Gambling advertisements similarly present gambling as a highly socially acceptable activity therefore likely contributing to youth gambling behaviors (Griffiths, 2003; Korn et al., 2005). Participants confirmed such potential effects of gambling advertisements as they reported that they perceive gambling ads as transmitting the message that gambling is widely accepted and entertaining. Youth are rarely told that they should not gamble. In fact, the opposite seems to occur as gambling is found to be integrated into family life. Results of several studies suggest that 40 – 68% of youth gamble with their families in their homes (Gupta & Derevensky, 1997; Huxley & Carroll, 1992). As well, parents have reported a general lack of awareness that gambling problems can occur in adolescence, therefore adopting the attitude that gambling is a harmless activity, as well as reinforcing this idea in their children (Ladouceur et al., 1998; Ladouceur et al., 2001).

Financial gain represents another motive that underlies youth participation in gambling activities (Jacobs, 2004; Korn et al., 2005). One of the primary themes to emerge in gambling advertisements often focus on the potential to win large amounts of money, thus resulting in a significant lifestyle change. Adolescents remain acutely aware of the fact that gambling ads place significant emphasis on the possible acquisition of wealth. They also remain aware that these ads fail to show individuals losing, depressed, or having difficulties. The ease of acquiring money may be particularly enticing to adolescents as some youth have a tendency for desiring immediate gratification (Darmody, 1991; White, 1997) and others remain concerned about long term vocational interests. The findings in other studies and clinical interview groups suggests a growing number of adolescents reporting to want to be professional gamblers upon graduating from school is particularly disconcerting.

A final reason that some youth gamble results from beliefs and attitudes that gambling is risky and exciting (Derevensky & Gupta, 1997). It is widely accepted that adolescence is a developmental period which is synonymous with multiple risky and sensation-seeking behaviors (e.g., Jessor & Jessor, 1977; Moore & Rosenthal, 1993). The current results also confirmed that youth believe the media portrays gambling as an exciting activity, therefore suggesting that gambling advertisements may directly influence youth to engage in gambling activities. Particularly, youth who are more susceptible to risky behaviors may be further influenced by gambling advertisements since the ads may create or reinforce any preconceived notions that gambling is exciting. Additionally, Hardoon and Derevensky (2002) have suggested that youth consider gambling to be exciting regardless of actual winnings, as the mere possibility of almost winning (e.g., in a slot machine) induces feelings of excitement that can reinforce an individual's gambling behavior.

Impact of Gambling Advertisements

Gambling advertisements employ various strategies that work to considerably influence the general populations' attitudes towards gambling, including those of youth. The results of multiple studies conducted in the field of advertising suggest ads are effective because of their ability to capture and maintain an individual's attention (Faber et al., 2004; Steenkamp & Baumgartner, 1992). As well, ads are denoted as effective when individuals continue to think about the product after an ad has ended (Igartua et al., 2003; Jones, 1995; Maddock & Fulton, 1996). Youth in this study revealed that features of particular gambling advertisements on the Internet, usually in the form of pop-ups, are bright, flashy, colourful, and 'eye-catching.' They also report catchy slogans or jingles on television ads which were frequently repeated in the focus groups. Bright, flashy colours fit with the goal that an ad must capture and maintain one's attention. Moreover, the current results revealed that bright, flashy colours were often associated with positively-rated ads for casinos and poker, again specifically online ads in the form of Internet pop-ups.

The impact that gambling advertisements exert on youth may further be explained according to the *elaboration likelihood model* (ELM). The ELM suggests that the effect of an advertisement is also partially dependent on an individual's level of involvement towards the issues portrayed in the ad as well as their ability to understand the message (Petty & Cacciopo, 1986; Whittler & Spira, 2002). For example, ads that contain the message that gambling can lead to a happier lifestyle would almost certainly attract youth who may be presently unhappy or experiencing stress in their daily lives (particularly true of youth experiencing gambling problems). Thus, not surprisingly, participants who positively-rated gambling ads also tended to express a desire to be more likely to gamble and be experiencing some gambling-related problems. In contrast, participants who did not report an attraction to gambling ads also tended not to endorse current or future plans to gamble.

The most important finding in the large-scale survey was that those individuals currently experiencing a gambling problem appear to demonstrate a vulnerability to gambling advertisements. That is, these youth were more likely to view gambling advertisements and gamble after seeing an advertisement than those who are currently not gambling or those who are social gamblers (gambling occasionally without any serious gambling-related problems). The fact that gambling advertisements are most enticing to individuals most interested in gambling should come as no great surprise. Males, older youth and problem gamblers were most susceptible to the lure of advertisements. Rather than promoting initiation of gambling, these advertisements appear to serve the function of maintaining established gambling habits and behaviors. Unfortunately, they appear particularly attractive to youth already experiencing problems.

While individuals with gambling problems were more likely to report that advertisements advocate and promote responsible gambling, this finding is consistent with a recent study of perceived outcome expectancies such that problem gamblers were not only more aware of the positive aspects of gambling but also the negative consequences associated with problem gambling (Gillespie et al., 2007). These youth understood the consequences and need for responsible gambling but did not perceive it as an immediate problem but one of long-term delay.

Regular gambling after viewing an advertisement was found to be a distinctive risk factor for adolescent gambling problems even after accounting for the predictive power of strong correlates of gambling problems (e.g., frequency of participation, gender). Subsequent analyses suggested that frequently viewing advertisements identified problem gamblers.

The most prevalent messages participants perceived in gambling advertisements is that gambling is entertaining, socially acceptable, harmless, and an easy opportunity to make money. While some of these messages incorporated a simultaneous message that gambling is financially rewarding but gamble responsibly, the gamble responsibly part of

the message appears to have been lost on those individuals already gambling excessively. Should the industry be serious about this message, they will have to re-educate the public.

Gambling advertising is prevalent. You can view it on television, in the corner convenience store, on billboards and on the Internet. A social learning theory perspective would suggest that the mere exposure and reinforcement of winning, happiness and excitement portrays gambling to be a normal and harmless form of entertainment. Coupled with the fact that few adolescents are concerned about their parent knowing they gamble adds to the potential impact of existing advertisements.

According to *cultivation theory*, the amount of media consumption an individual is exposed to will determine the likelihood that they adopt dominant, hegemonic meanings and beliefs as their own (McQuail & Windahl, 1993). Heavy exposure to media messages cultivates attitudes consistent with a media-conjured version of reality. Although this theory is typically used in relation to television viewership, it is equally useful in theorizing the ways in which the mass media, collectively, cultivates certain dominant meanings. The popular view of gambling as entertaining and harmless matches perfectly the rose-coloured perspective offered by advertising. However, because the media use data in this study were self-reported, and relied upon recall (rather than the use of diaries or logging techniques), they are likely under-estimates of the actual viewing and influence of advertisements.

The results have important social policy implications. If replicated with adults, concern over the impact of advertisements on problem gamblers represents a serious issue. Gambling providers, often governments, should heed the warnings about the impact upon these vulnerable individuals. At the very least, the development of responsible codes of practice and guidelines should be established. The fact that we have a large number of underage youth gambling in regulated gambling venues also represents a serious concern. Gambling operators and regulators have a responsible to ensure that underage minors are not permitted to gamble in such establishments. The ability of our adolescents to gamble in spite of regulations prohibiting them to do so, along with a general societal permissive attitude toward gambling, represents a tacit acceptance of the social desirability of gambling. Our legislators, regulators and the industry should take careful notice of these findings.

Limitations & Implications for Future Research

It is important to remember that the study incorporated a cross sectional design and that responses were based upon self-reports. As media campaigns are constantly changing over time, sampling techniques taken over time are important to include. A longitudinal design would also more accurately determine changes in observed advertisements and their impact.

REFERENCES

- Azmier, J. (2000). *Gambling in Canada, Triumph, Tragedy, or Tradeoff? Canadian gambling behavior and attitudes: Summary report*. Calgary, AB: Canada West Foundation.
- Bandura, A. (1986). *The social foundation of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Brodeur, D. A., & Boden, C. (2000). The effects of spatial uncertainty and cue predictability on visual orienting in children. *Cognitive Development, 15*, 367-382.
- Burke, R. R., & Srull, T. K. (1989). Competitive interference and consumer memory for advertising. *Journal of Consumer Research, 15*, 55-68.
- Chandon, J.-L., & Chtourou, M. S. (2005). Factors Affecting Click-Through Rate. In C. P. Haugtvedt & K. A. M. e. al. (Eds.), *Online consumer psychology: Understanding and influencing consumer behavior in the virtual world. Advertising and consumer psychology* (pp. 143-165). Mahwah, NJ: Lawrence Erlbaum Associates.
- Charmaz, K. (2002). Qualitative interviewing and grounded theory analysis. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of Interview Research: Context and Method* (pp. 675-694). Thousand, Oaks: Sage Publications, Inc.
- Charmaz, K. (2004). Grounded theory. In S. N. Hesse-Biber & P. Leavy (Eds.), *Approaches to qualitative research: A reader on theory and practice* (pp. 496-521). New York: Oxford University Press.
- Darmody, J. P. (1991). The adolescent personality, formal reasoning, and values. *Adolescence, 26*, 731-742.
- David, P., Liu, K., & Myser, M. (2004). Methodological artifact or persistent bias? Testing the robustness of the third-person and reverse third-person effects for alcohol messages. *Communication Research, 31*, 206-233.
- Davison, W. P. (2003). The third-person effect in communication. *Public Opinion Quarterly, 47*, 1-15.
- De Pelsmacker, P., Geuens, M., & Anckaert, P. (2002). Media context and advertising effectiveness: The role of context appreciation and context/ad similarity. *Journal of Advertising, 31*, 49-61.
- Derevensky, J. (in press). Youth gambling problems: The hidden addiction. In Y. Kaminer & O. G. Buckstein (Eds.), *Adolescent substance abuse: Psychiatric comorbidity and high risk behaviors*. New York: Haworth Press.
- Derevensky, J. L., & Gupta, R. (1997, June). *Adolescent and adult gambling behavior: Its relationship to risk-taking*. Paper presented at the Second Bi-Annual Conference on Problem and Compulsive Gambling, Toronto, Canada.
- Derevensky, J., & Gupta, R. (2001). *Lottery Ticket Purchases by Adolescents: A Qualitative and Quantitative Examination*. Report prepared for the Ontario Ministry of Health and Long-Term Care, Toronto, Ontario, 152 pp.
- Derevensky, J., Gupta, R., Hardoon, K., Dickson, L., & Deguire, A-E. (2003). Youth gambling: Some social policy issues. In G. Reith (Ed.), *Gambling: Who wins? Who loses?* New

- York: Prometheus Books, pp. 239-257.
- Derevensky, J. L., Gupta, R., & Winters, K. C. (2003). Prevalence rates of youth gambling problems: Are the current rates inflated? *Journal of Gambling Studies*, 19, 405-425.
- Derevensky, J., Pratt, L., Hardoon, K., & Gupta, R. (in press). The relationship between gambling problems and impulsivity among adolescents: Some preliminary data and thoughts. *Journal of Addiction Medicine*
- Dickson, L., Derevensky, J. L., & Gupta, R. (2004a). Harm reduction for the prevention of youth gambling problems: Lessons learned from adolescent high-risk prevention programs. *Journal of Adolescent Research*, 19, 233-263.
- Dickson, L., Derevensky, J. L., & Gupta, R. (2004b). Youth gambling problems: A harm reduction prevention model. *Addiction Research & Theory*, 12, 305-316.
- Duck, J. M., & Mullin, B. (1995). The perceived impact of the mass media: Reconsidering the third person effect. *European Journal of Social Psychology*, 25, 77-93.
- Eder, D., & Fingerson, L. (2002). Interviewing children and adolescents. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of Interview Research: Context of Method* (pp. 181-201). Thousand Oaks: Sage Publications.
- Ellenbogen, S., Derevensky, J., & Gupta, R. (2007). Gender differences among adolescents with gambling related problems. *Journal of Gambling Studies*, 23, 133-143.
- Ellenbogen, S., Gupta, R., & Derevensky, J. (2007). A cross-cultural study of gambling behavior among adolescents. *Journal of Gambling Studies*, 23, 25-39.
- Ellickson, P. L., Collins, R. L., Hambarsoomians, K., & McCaffrey, D. F. (2005). Does alcohol advertising promote adolescent drinking? Results from a longitudinal assessment. *Addiction*, 100, 235-246.
- Faber, R. J., Lee, M., & Nan, X. (2004). Advertising and the consumer information environment online. *American Behavioral Scientist*, 48, 447-466.
- Feeney, D. (2004). Responsible gaming advertising: A critical review. Minnesota: Minnesota State Lottery.
- Felsher, J. R., Derevensky, J. L., & Gupta, R. (2003). Parental influences and social modeling of youth lottery participation. *Journal of Community and Applied Social Psychology*, 13, 361-377.
- Felsher, J. R., Derevensky, J. L., & Gupta, R. (2004). Lottery playing amongst youth: Implications for prevention and social policy. *Journal of Gambling Studies*, 20, 127-153.
- Fisher, S. (2000). Developing the DSM-IV-MR-J to identify adolescent problem gambling in non-clinical populations. *Journal of Gambling Studies*, 16(2/3), 253-274.
- Gillespie, M., Derevensky, J., & Gupta, R. (2007). The utility of outcome expectancies in the prediction of adolescent gambling behavior. *Journal of Gambling Issues*, 19, 69-85.
- Griffiths, M. D. (1993). Fruit machine gambling: The importance of structural characteristics. *Journal of Gambling Studies*, 9, 101-112.

- Griffiths, M.D. (1999). Gambling technologies: Prospects for problem gambling. *Journal of Gambling Studies*, 15, 265-283.
- Griffiths, M. D. (2003, January). *Does gambling advertising contribute to problem gambling?* Paper presented at the World Lottery Association Conference, London.
- Guba, E. G., & Lincoln, Y. S. (2004). Competing paradigms in qualitative research: Theories and issues. In S. N. Hesse-Biber & P. Leavy (Eds.), *Approaches to Qualitative Research: A reader on theory and practice* (pp. 17-38). New York: Oxford University Press.
- Gupta, R., & Derevensky, J. (1996). The Gambling Attitude Questionnaire. McGill University.
- Gupta, R., & Derevensky, J. L. (1997). Familial and social influences on juvenile gambling. *Journal of Gambling Studies*, 13(179-192).
- Gupta, R., & Derevensky, J. L. (1998a). Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. *Journal of Gambling Studies*, 14, 319-345.
- Gupta, R., & Derevensky, J. L. (1998b). An empirical examination of *Jacob's General Theory of Addictions*: Do adolescent gamblers fit the theory? *Journal of Gambling Studies*, 14, 17-49.
- Hardoon, K., & Derevensky, J. L. (2002). Child and adolescent gambling behavior: Current knowledge. *Clinical Child Psychology and Psychiatry*, 7, 263-281.
- Holmes, D. S. (1968). Dimensions of projection. *Psychological Bulletin*, 69, 248-268.
- Holmes, D. S. (1978). Projection as a defense mechanism. *Psychological Bulletin*, 85, 677-688.
- Huh, J., Delorme, D. E., & Reid, L. N. (2004). The Third-Person Effect and its influence on behavioral outcomes in a product advertising context: The case of direct-to-consumer prescription drug advertising. *Communication Research*, 31, 568-599.
- Huxley, J., & Carroll, D. (1992). A survey of fruit machine gambling among children and adolescents. *Journal of Gambling Studies*, 8(167-179).
- Igartua, J. J., Cheng, L., & Lopes, O. (2003). To think or not to think: Two pathways towards persuasion by short films on AIDS prevention. *Journal of Health Communication*, 8, 513-528.
- Jacobs, D. F. (1986). A general theory of addictions: A new theoretical model. *Journal of Gambling Behavior*, 2, 15-31.
- Jacobs, D. F. (2004). Youth gambling in North America: Long term trends and future prospects. In J. L. Derevensky & R. Gupta (Eds.), *Gambling Problems in Youth: Theoretical and Applied Perspectives* (pp. 1-24). New York: Kluwer Academic.
- Jessor, S. J., & Jessor, R. (1977). *Problem behavior and psychological development: A longitudinal study of youth*. New York: Academic Press.
- Jones, J. P. (1995). *When ads work: New proof that advertising triggers sales*. New York: Lexington Books.
- Kelly, K., & Edwards, R. W. (1998). Image advertisements for alcohol products: Is their appeal associated with adolescents' intention to consume alcohol? *Adolescence*, 33, 47-59.

- Korn, D. A. (2000). Expansion of gambling in Canada: Implications for health and social policy. *Canadian Medical Association Journal*, 163, 61-64.
- Korn, D. A., Hurson, T., & Reynolds, J. (2005). *Final Report: Commercial gambling advertising: Possible impact on youth knowledge, attitudes, beliefs and behavioral intentions*: Ontario Problem Gambling Research Centre.
- Korn, D. A., & Shaffer, H. J. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, 15, 289-365.
- Ladouceur, R., Jacques, C., Ferland, F., & Giroux, I. (1998). Parents' attitudes and knowledge regarding gambling among youths. *Journal of Gambling Studies*, 14, 83-90.
- Ladouceur, R., Vitaro, F., & Cote, M. (2001). Parents' attitudes, knowledge, and behavior toward youth gambling: A five-year follow-up. *Journal of Gambling Studies*, 17, 101-116.
- Maddock, R. C., & Fulton, R. L. (1996). *Marketing to the mind: Right brain strategies for advertising and marketing*. Westport, CT: Quorum Books.
- Martin, S. E., Snyder, L. B., Hamilton, M., Fleming-Milici, F., Slater, M. D., Stacy, A., et al. (2002). Alcohol advertising and youth. *Alcoholism: Clinical and Experimental Research*, 26, 900-906.
- McQuail, Denis & Sven Windahl (1993): *Communication Models for the Study of Mass Communication*. London: Longman.
- Messerlian, C., & Derevensky, J. L. (2007). Evaluating the role of social marketing campaigns to prevent youth gambling problems: A qualitative study. *Canadian Journal of Public Health*, 98, 101-104.
- Messerlian, C., Derevensky, J. L., & Gupta, R. (2005). Youth gambling problems: A public health perspective. *Health Promotion International*, 20, 69-79.
- Moore, S. M., & Rosenthal, D. A. (1993). Venturesomeness, impulsiveness, and risky behavior among older adolescents. *Perceptual and Motor Skills*, 76, 98.
- Najavits, L. M., Grymala, L. D., & George, B. (2003). Can advertising increase awareness of problem gambling? A statewide survey of impact. *Psychology of Addictive Behaviors*, 17, 324-327.
- Noel, H. (2006). The spacing effect: Enhancing memory for repeated marketing stimuli. *Journal of Consumer Psychology*, 16, 306-320.
- Nower, L., & Blaszczynski, A. (2004). A pathways approach to treating youth gamblers. In J. L. Derevensky & R. Gupta (Eds.), *Gambling problems in youth: Theoretical and applied perspectives* (pp. 189-210). New York: Kluwer Academic/Plenum Publishers.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central peripheral routes to attitude change*. New York: Springer-Versa.
- Pollay, R. W. (1996). Advertising and cigarettes, *ARHP Clinical Proceedings*. Education and Prevention Editorial.
- Pollay, R. W. (2000). Targeting youth and concerned smokers: evidence from Canadian tobacco industry documents. *Tobacco Control*, 9, 136-147.
- Pucci, L. A., & Siegal, M. (1999). Exposure to brand specific cigarette advertising in magazines and its impact on youth smoking. *Preventive Medicine*, 29, 313-320.

- Roberts, D. F. (2000). Media and youth: Access, exposure and privatization. *Journal of Adolescent Health*, 27, 8-14.
- Rose, I. N. (2001). A guideline for advertising Internet gambling., from <http://www.gamblingandthelaw.com/InternetAdsGuidelines.html>
- Saffer, H. (2002). Alcohol advertising and youth. *Journal of Studies on Alcohol*, 63, 173-181.
- Salwen, M. B., & Dupagne, M. (1999). The third-person effect. *Communication Research*, 26, 523-549.
- Santana, Y., Gonzalez, B., Pinilla, J., & Barber, P. (2003). Young adolescents, tobacco advertising, and smoking. *Journal of Drug Education*, 33, 427-444.
- Shaffer, H. J., Forman, D. P., Scanlan, K. M., & Smith, F. (2000). Awareness of gambling-related problems, policies and educational programs among high school and college administrators. *Journal of Gambling Studies*, 16, 93-101.
- Shah, D. V., Faber, R. J., & Youn, S. (1999). Susceptibility and severity: Perceptual dimensions underlying the third-person effect. *Communication Research*, 26, 240-267.
- Sogaard, A. J., & Fonnebo, V. (1992). Self-reported change in health behavior after a mass media-based health education campaign. *Scandinavian Journal of Psychology*, Statistics Canada (2003). *Perspectives on labour and income: Fact-sheet on gambling*. Ottawa: Statistics Canada.33, 125-134.
- Statistics Canada. (2004). *Advertising and related services table*, from <http://www40.statcan.ca/101/cst01/serv17.htm>
- Steenkamp, J. E. M., & Baumgartner, H. (1992). The role of optimum stimulation level in exploratory consumer behavior. *Journal of Consumer Research*, 19, 434-448.
- Stinchfield, R. D., & Winters, K. (1998). Gambling and problem gambling among youth. *Annals of the American Academy of Political and Social Sciences*, 556, 172-185.
- Stout, P. A., & Burda, B. L. (1989). Zipped commercials: Are they effective? *Journal of Advertising*, 18, 23-32.
- Vitaro, F., Wanner, B., Iadecola, R., Brendgen, M. & Tremblay, R.E. (2004). Trajectories of Gambling During Adolescence. *Journal of Gambling Studies*. 20, 47-69.
- Volberg, R. (2003). What makes efficient and effective issue messaging campaigns to youth: A gambling case study: Department of Justice, Office of Juvenile Justice and Delinquency Prevention, Office of Justice.
- Wakefield, M., Flay, B., Nichter, M., & Giovino, G. (2003). Role of the media in influencing trajectories of youth smoking. *Society for the Study of Addiction to Alcohol and Other Drugs*, 98, 79-103.
- Watson, N. A., Clarkson, J. P., Donovan, R. J., & Giles-Corti, B. (2003). Filthy or fashionable? Young people's perceptions of smoking in the media. *Health Education Research*, 18, 554-567.
- White, J. (1997). Adolescent conflicts. *Modern Psychoanalysis*, 22, 175-179.
- Whittler, T. E., & Spira, J. S. (2002). Model's race: A peripheral cue in advertising messages? *Journal of Consumer Psychology*, 12, 291-301.
- Winters, K., & Anderson, N. (2004).

Les effets de la publicité sur les attitudes et les comportements
de jeu des enfants et des adolescents
The effects of gambling advertisements on child and adolescent gambling attitudes and behaviors

- Winters, K. C., Stinchfield, R. D., & Kim, L. G. (1995). Monitoring adolescent gambling in Minnesota. *Journal of Gambling Studies*, *11*, 165-183.
- Wiseman, C. V., Sunday, S. R., & Becker, A. E. (2005). Impact of the media on adolescent body image. *Child & Adolescent Psychiatric Clinics of North America*, *14*, 453-471.
- Woods, R. T. A., & Griffiths, M. D. (1998). The acquisition, development and maintenance of lottery and scratchcard gambling in adolescence. *Journal of Adolescence*, *21*, 265-273.
- Wyllie, A., Zhang, J. F., & Casswell, S. e. a. (1998). Responses to televised alcohol advertisements associated with drinking behavior of 10-17-year-olds. *Addiction*, *93*, 361-371.
- Wynne, H. J., & Shaffer, H. J. (2003). The socioeconomic impact of gambling: The Whistler symposium. *Journal of Gambling Studies*, *19*, 111-121.
- Youn, S., Faber, R. J., & Shah, D. V. (2000). Restricting gambling advertising and the third-person effect. *Psychology & Marketing*, *17*, 633-649.

APPENDIX A – MODERATOR GUIDE FOR FOCUS GROUPS

Gambling (~10 minutes)

Objective: To determine what students think about gambling, what type of gambling activities they engage in, and their perceptions of the risk/benefits.

When I say the word gambling, what do you think of?

What kind of gambling activities do you partake in?

Prompts:

Is there anything else you can think of that would be considered gambling?

(Scratch cards/ lottery, poker, dice, sports betting, Internet)

What about other kids your age?

How often would you say that you or other kids your age gamble?

Exposure and Characteristics of Gambling Advertisements (~15 minutes)

Objective: To determine students' knowledge of the types of gambling advertisements that exists. What characteristics are students most aware of/do they relate to?

Have any of you ever seen ads/commercials for gambling products?

Television

Radio

Newspapers/ magazines

Internet (e.g. pop-ups)

Which ads (on TV/ radio/ etc...) do you remember seeing the most?

What did you like about those ads?

What didn't you like about those ads?

Influence of Gambling Advertisements (~20 minutes)

Objective: To determine what message the students perceive from the ads. To determine what effects and influence the ads may have on their behaviors and/or attitudes towards gambling.

What do you think the purposes of the ads are?

Do the ads have any sort of effect on you? If so, in what way?

Do you think these ads make you more interested or less interested in gambling?

Do you think these ads could make you more/less interested in buying or playing?

What are the messages behind these ads? Who do you think these ads are targeting?

How do you feel when you see gambling advertisements?

What comes to your mind while seeing (or hearing) a gambling advertisement?

Thank You!

APPENDIX B – PROTOCOL FOR INTRODUCING FOCUS GROUP

Introduce ourselves, where we are from:

We are here because we want to have a discussion about what you know about gambling and gambling advertisements. We want to know what each of think and feel about these topics and other related questions we will ask. To start with, there are a couple of ground rules that will help the discussion go smoothly if we all stick to them:

Ground Rules

1. The discussion will last one period. It will be tape recorded; also, *Observer* will be taking notes and acting as an observer during the session in order to clarify things that we might miss on the tape recorder.
2. Please speak clearly and one at a time – again, this is important for the purpose of tape recording, so we can understand what everyone said when we listen to the tapes afterwards.
3. Throughout the discussion, we would like everyone here to participate equally. Everyone's opinion and views are equally important for what we are doing, and we are interested in what each of you has to say.
4. There is no right or wrong answers here
5. Assurance of anonymity and confidentiality: After we leave here, we will not have any record of your names associated with what is on the tapes. We also ask that whatever is said in these rooms remains that way; please do not talk about what anyone else has said to other people (in school or out of school); that way everyone has equal and fair confidentiality.
6. Lastly, we cannot answer specific questions you may have about gambling during the discussion because the point is to understand what you think and know about the topics discussed. However, we will leave 5 – 10 minutes at the end for a debriefing and answer any questions you may have.

We appreciate your participation very much.

Start discussion (see questions guide)

End of discussion: Debrief, answer questions and clarify. Give them our contact information.

APPENDIX C – QUESTIONNAIRES