

Impact of gambling advertisements and marketing on children and adolescents: Policy recommendations to minimise harm

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Abstract

With the proliferation and acceptance of gambling in society, gambling advertisements have become increasingly prominent. Despite attempts to protect minors from harm by prohibiting them from engaging in most forms of gambling, there are few restrictions on the marketing of gambling products. Evidence of high rates of gambling and associated problems amongst youth indicates that the issue of youth gambling must be addressed to minimise harm. This paper aims to examine the current marketing techniques used to promote gambling and how they affect youth. The effect of multiple forms of advertisements will be discussed, including advertising placement in the media, point-of-sale displays, sports sponsorship, promotional products, celebrity endorsements, advertisements using Internet and wireless technology, and content which may appeal to or mislead children. Based on research in gambling and other public health domains, including tobacco, alcohol, and junk food advertising, recommendations are made for appropriate regulations for gambling advertisements to minimise the potential harms.

Keywords: youth, children, adolescents, gambling, advertisements, marketing, promotions, policy recommendations

Introduction

Gambling is one of the fastest growing industries in the world (Binde, 2006). With the increasing accessibility and availability of gambling on Internet and wireless technology, in addition to more traditional forums, international revenue from legalised gambling is estimated to surpass US\$100 billion by 2010 (Price Waterhouse Coopers, 2005). Concomitant with the growth in revenues, gambling advertising expenditure also appears to be increasing, verified by reports from Canada, Europe, and the UK (Advertising Association, 2007; Binde, 2007; British Columbia Lottery Corporation, 1996). Moreover, the allocation of money devoted to advertising gambling far outweighs the amounts designated for the prevention of problem gambling. For example, Ontario reportedly spends more money on prevention, treatment, and research than any other international

jurisdiction, expending C\$36 million in 2003/2004 (Sadinsky, 2005). However, the Ontario Lottery and Gaming Corporation's advertising budget is in excess of C\$570 million, which excludes the budgets of the three provincial commercial casinos, which similarly advertise their offers (Williams, West, & Simpson, 2007). With increases in both gambling accessibility and gambling marketing in society, the impact of advertising on at-risk populations, including youth, needs to be considered.

There is increasing evidence to suggest that minors are engaging in gambling and developing more gambling-related problems than any other age cohort. Research from Canada, the US, the UK, Norway, and Australia shows that 63% to 82% of teenagers (12 to 17 years of age) gamble each year, 4% to 7% of adolescents exhibit serious patterns of pathological gambling, and 10% to 15% are at risk for either developing or returning to a serious gambling problem (Delfabbro & Thrupp, 2003; Derevensky & Gupta, 2004; Johansson & Götestam, 2003; National Research Council, 1999). Furthermore, research suggests that problem gamblers typically develop these behaviours during their teenage years (Blaszczynski, Walker, Sagris, & Dickerson, 1997). These high rates of problem gambling amongst youth, which are significantly higher than those found in adult populations, are particularly disconcerting given the strong associations found between problem gambling and other maladaptive behaviours, including delinquency, substance use, gorging/vomiting, and unprotected sex, as well as mood and personality disorders, criminality, disrupted social relationships, poorer educational outcomes, and suicidal ideation and attempts (Derevensky & Gupta, 2004; Fisher, 1999; Gupta & Derevensky, 1998; Huang, Jacobs, Derevensky, Gupta, & Paskus, 2007; Yeoman & Griffiths, 1996).

As the gambling industry expands, new technology is introduced, and social acceptability continues, several national commissions and prominent researchers have predicted that there will likely be a progressive increase in serious gambling-related problems experienced by youth (Derevensky & Gupta, 2004; Jacobs, 2004). Although most jurisdictions have legislation prohibiting minors from engaging in many regulated forms of gambling, the opportunities to control underage gambling are limited, and youth are increasingly exposed to messages from a broad range of media which endorse, promote, and glamorise gambling, suggesting further effort is required to protect this population from gambling-related harm.

The powerful impact of advertising on children and adolescents has been examined in several public health domains, including alcohol, tobacco, and junk food consumption. But while regulations are increasingly enforced for these products in recognition of the potential harm caused by certain marketing techniques, the effects of gambling advertisements on youth have been largely neglected. Currently, guidelines for responsible gambling are largely voluntary (e.g., the American Gaming Association's voluntary Code of Conduct for Responsible Gaming, which includes a pledge to "advertise responsibly"; American Gaming Association, 2003). Furthermore, US lotteries are exempt from Federal Truth in Advertising laws due to the separation of powers (lotteries in the US are state-run and therefore exempt from federal law). Both the UK National Lottery Commission and Loto-Québec have been praised for sound and responsible codes of practice (Griffiths, 2005), but notwithstanding current endeavours,

the problems experienced by adolescent gamblers indicate that further efforts are necessary.

Despite the increasing awareness of the importance of addressing the issue of youth gambling, and steps taken towards implementing advertising codes, there is little empirical research on the impact of the marketing of gambling products on youth. Consequently, until further research is conducted, in addition to examining research on gambling advertisements, it is necessary to examine studies of marketing in other public health domains, such as alcohol and tobacco, and consider whether it is appropriate to extrapolate the findings to gambling. This paper aims to examine the current advertising and marketing practices used to promote gambling products and how they may affect youth and to recommend policies regulating the marketing of gambling products to minimise the risks presented to youth.

Marketing strategies used to promote gambling

Gambling advertisements in the media

It is widely acknowledged that the media have a powerful effect on people's behaviours and attitudes, and that the objective of any commercial advertisement is to capture consumer attention, convey positive attitudes towards the product, and encourage the adoption of the messages espoused. Youth appear to be particularly vulnerable to the effects of advertising. A recent study found young adolescents (aged 11 to 12) exposed to high levels of advertising for alcohol from multiple sources were subsequently 50% more likely to drink and 36% more likely to have intentions to drink in the upcoming year than those at lower levels of advertising exposure (Collins, Ellickson, McCaffrey, & Hambarsoomians, 2007), demonstrating the enduring effects of advertising on youth. Gambling advertisements directly increase the availability of gambling by informing individuals about opportunities to gamble and attempting to influence and modify attitudes through their communicative processes (Hastings, Anderson, Cooke, & Gordon, 2005).

The high level of exposure to gambling advertisements in society has led to its normalisation and perception as an acceptable, harmless, and credible activity (Moore & Ohtsuka, 1999). Griffiths and Wood (2001) have argued that advertising introduces children and teens to the principles of gambling which occurs in a social context where gambling is generally viewed as an exciting, harmless form of entertainment. Adolescents perceive the central messages of gambling advertisements to be that gambling leads to winning (easy money) and that 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 (Derevensky et al., 2007).

Adolescents are frequently exposed to gambling advertisements, most often on television (reportedly viewed by 96% of youth), closely followed by the Internet (93%), with advertisements on billboards and in newspapers and magazines also commonly viewed (Derevensky et al., 2007; Felsher, Derevensky, & Gupta, 2004). Similar to what has been found in studies of alcohol advertising, gambling commercials appear to have a significant influence on youth; one study found 42% of youth report that gambling advertisements make them want to try gambling and 61% imagine or dream about what they could buy with their winnings (Derevensky et al., 2007). An earlier study found 39% of adolescents would be more likely to purchase a lottery ticket after viewing an advertisement (Felsher et al., 2004).

The placement and timing of gambling advertisements, which may encourage the perception that gambling is harmless fun with no negative consequences, and result in increased participation rates, need to be regulated to reduce the exposure of youth to gambling products. Research on alcohol advertisements confirms the importance of advertisement timing and placement. For example, youth recalled many more television commercials for alcohol aired during sporting events and on late-night television programs popular among youth (Wyllie, Zhang, & Casswell, 1998). In response to concerns about the negative consequences of alcohol and tobacco advertising, regulations have been implemented, with some observed success, that prevent these products from being prominently advertised in places viewed by youth. Following a reduction in alcoholic beverage advertising in the US, the incidence of alcohol problems, including binge drinking and alcohol involvement in fatal crashes, decreased amongst young people (Hacker & Stuart, 1995). Similar effects have been found internationally with an analysis of data from 20 countries over a 26-year period (Saffer & Dave, 2002), indicating that advertising bans resulted in decreased alcohol consumption amongst youth.

Some regulations have been enacted to limit the advertisement of gambling products. For example, in the UK, general advertising of gambling products was banned in multiple forms of media, and casinos and bookmakers have been banned from advertising on television before 9 p.m. (Office of Public Sector Information, 2005). However, campaigns for bingo, the National Lottery, and sports betting during televised sporting events remain (Office of Public Sector Information, 2005). Australian regulations have also restricted the principle gaming agency TAB from all advertising on television and other media, while still allowing them to print race dividends in the newspaper (Totalizator Regulation, 2005). These exceptions permitted by regulators provide the message that some forms of gambling are acceptable, undermining attempts to reduce the exposure of minors to gambling. Enabling youth to view gambling advertisements may result in increased gambling participation or recruitment of youth as future players. Therefore, gambling advertisements should not be permitted to be shown during television and radio timeslots primarily accessed by children or adolescents, or advertised where they may be frequently viewed by youth, including on billboards, on public transport, and in print publications where a prominent proportion of readership are minors. Reducing the exposure of youth to these advertisements should reduce the normalisation of gambling as an acceptable, risk-free activity.

Point of sale

Point-of-sale advertising is designed to target consumers at the place of purchase by drawing attention to the advertised brand. Typically, point-of-sale materials are placed alongside soft drinks, candy, magazines, and chewing gum — all products that are seemingly innocuous and that appeal to the young consumer. Cigarette point-of-sale advertisements have been shown to increase positive brand user imagery amongst primary-school children (Donovan, Jancey, & Jones, 2002), which is particularly concerning given that these advertisements are placed directly in the situation where products can be purchased and, hence, increase the likelihood of impulse purchasing. Studies in the US and the UK have found adolescents are frequently exposed to and recall point-of-sale advertisements for cigarettes, which has been associated with brand preference and likelihood of smoking (MacFadyen, Hastings, & MacKintosh, 2001; Schooler, Feighery, & Flora, 1996; Wakefield, Ruel, Chaloupka, Slater, & Kaufman, 2002). In recognition of the impact of point-of-sale advertising on youth, this marketing strategy for cigarettes has been banned in a number of countries, including Australia, Canada, Ireland, and New Zealand. Similar effects have been found for point-of-sale marketing techniques of gambling products; one study demonstrated that the majority of adolescents surveyed reported viewing lottery ticket promotions at counters of local convenience stores and that this recall was associated with greater intent to purchase (Felsher et al., 2004). Given the effect of point-of-sale advertising on children and adolescents, it is recommended that this form of marketing be restricted from display in all stores entered by minors.

Sponsorship of sports

Corporate sponsorship remains an effective form of indirect advertising which shapes attitudes by glamorising products, builds public goodwill towards the company, and associates potentially harmful products with healthy positive images, in addition to diminishing the effectiveness of health-promotion programs, especially those aimed at youth (Maher, Wilson, Signal, & Thomson, 2006). The effect of sports sponsorship on children is demonstrated by findings that different cigarette brands were most popular with children aged 12 to 14 in each of the three Australian states surveyed. In each state, children preferred the brand that sponsored their state's major league football competition (Pritchard, 1992). In recognition of this research, legislation has been enacted in various jurisdictions, including the UK, Canada, and Australia, prohibiting tobacco companies from sponsoring sporting events (Tobacco Act, 1998; Tobacco Advertising and Promotion Act, 2002; Tobacco Advertising Prohibition Act, 1992).

However, sports sponsorship is increasingly being viewed as a central marketing platform for gaming companies, with multiple options to reach consumers and large sums of money invested. For example, the Channel 4 coverage of the 2005 Ashes Cricket Series was sponsored by Betfair, an online betting site in the UK (Adlaw by Request, 2007). Sponsorship deals in Premier League football increased from 2006 to 2007 by 25% to approximately £70 million, which included deals between multiple online casino operators. These deals include brand promotion on team uniforms and replica uniforms (adult and child sizes), including club shirts, the most popular merchandise sold to fans. The FA Premier League *National fan survey* of 1995 suggested that three out of ten

(30%) fans find products associated with their club 'more attractive', with younger fans being much more strongly affected (FA Premier League, 1995).

Some regulations regarding the sponsorship of sporting events by the gaming industry have been introduced. For instance, in the UK the use of logos and promotional material on merchandise designed for children, including sports shirts, has been banned (Office of Public Sector Information, 2005). However, these restrictions do not apply to sponsorship deals signed prior to September 2007, resulting in a plethora of children's club merchandise available, including shirts, sneakers, shorts, and socks, displaying brands of gambling companies. The prominent exposure for gambling companies obtained through sports sponsorship poses a direct risk to youth at a developmental age that makes them susceptible to influence. This risk is significantly higher for young males given that sports are more popular amongst this group.

Of particular concern is the involvement of gaming companies in the sponsorship of youth sporting events. In 2006/2007, the North Carolina State Lottery spent more than US\$385,000 on advertising and sponsorships at university sports events, prompting political discourse over the ethics of associating gambling and athletics (Curliss, 2007). A New Zealand study of the most popular sports played by 5- to 17-year-olds at national, regional, and club levels found gaming companies, including gaming machine trusts, were the most common sponsor (Maher et al., 2006). Several of these sponsors included naming rights of teams, which is noted with concern due to the increased commercial exposure as well as the normalisation of their products (Maher et al., 2006).

Although sponsorship provides valuable income to support sporting teams and events, other funding options are possible. For example, following a ban on tobacco sponsorship in Australia, compensatory funding was provided by state governments by imposing an additional tax on the wholesale price of tobacco (Crompton, 1993). Alternatively, companies could provide money to a blind government-managed trust in order that sponsorship funds could still be supplied to sporting teams, and corporations and trusts could still act with charitable intentions, while the sporting team is not linked with any particular gaming association (Maher et al., 2004). Companies and trusts that principally generate their revenue from gambling should be banned from promoting or advertising their name or products, including the use of naming rights, branding, and logos through the sponsorship of sporting teams and events.

Promotional products

Promotional items include hats, T-shirts, posters, and other products that feature a brand name or company logo or slogan. According to the elaboration likelihood model of persuasion (Petty, Wegener, & Fabrigar, 1997) indirect forms of advertising such as in-store promotions, use of products by celebrities, and promotional items influence consumers through automatic, minimally attentive processes, which may be even more effective than more directive advertising strategies at associating products with images (such as being cool or glamorous) or good times. A study of sixth and seventh grade children (aged 11 to 12 years) found that the odds of drinking alcohol were nearly double for those who owned items that advertise alcohol even after controlling for other

variables (Collins et al., 2007). This finding corroborates other alcohol research (McClure, Clin, Gibson, & Sargent, 2006) and is consistent with research on cigarettes (Schooler et al., 1996). It is likely that these findings would extrapolate to gambling, and the number of products promoting gambling is increasing exponentially, including hats, t-shirts, cards, poker sets and chips, mouse pads, and other seemingly innocuous items that are frequently used by children and adolescents. Given the profound impact of advertising on youth, it is recommended that products promoting gambling or gaming companies should not be manufactured in child sizes, be available for purchase by minors, or be given away in free promotions or as prizes.

Celebrity endorsements

The use of celebrities to endorse and add credibility to gaming brands is becoming increasingly popular amongst the major operators. Popular female celebrities, including Caprice (UK actress/supermodel), Brooke Burke (America's best-selling calendar model and hostess of popular *E!'s Wild on...*), and Nikki Cox (star of the popular weekly television show *Las Vegas*), endorse online gambling sites in promotions and advertisements that undoubtedly appeal to young males and encourage youth to engage in gambling activities. Popular entertainers and sports stars endorse products by appearing in traditional media advertisements as well as wearing branded merchandise available for consumer purchase, including clothing, shoes, and hats, and even temporary tattoos, as in the case of boxer Bernard Hopkins, who advertised Golden Palace's online casino site on his shirtless back during a title match (Iole, 2007). The widespread international Texas Hold 'em craze has resulted in an increased use of professional gamblers to endorse gambling as a legitimate form of entertainment and a potential career, resulting in a large number of adolescents aspiring to be professional gamblers.

Research demonstrates that when celebrity endorsements are used, advertisements are more believable, message recall is enhanced, brand recognition improves, and positive attitudes about brands result. As well, a potentially profound increase in the profitability of endorsed products may result (Friedman & Friedman, 1979; Kamins, Brand, Hoeke, & Moe, 1989; Mathur, Mathur, & Rangan, 1997; Petty, Cacioppo, & Schumann, 1983). Social learning theory (Bandura, 1977) holds that youth are developmentally establishing their independence and identity and are heavily influenced by role models, making them particularly susceptible to celebrity endorsements. Research demonstrates that young people frequently adopt certain self-images, lifestyle patterns, and purchasing decisions based on observation of individuals presented in the media (Lockwood & Kunda, 1997). These vicarious role models can have a significant effect on the career aspirations, educational choices, and self-views of young adults (Bush, Martin, & Bush, 2004). A study of kindergarten children revealed that children who were shown a videotaped model winning in a gambling activity took significantly more risks when they played than those shown a losing player (Tremblay, Huffman, & Drabman, 1998). Subsequently, the use of professional gamblers who win millions of dollars through gambling (e.g., Chris MoneyMaker, World Series of Poker Champion) to promote Web sites or online gambling products may encourage youth to engage in risky gambling behaviour. Endorsements of gambling and gambling products from individuals who are likely to

appeal to youth and increase the likelihood of youth gambling involvement should be limited.

Use of Internet advertisements

Online gambling is increasing at a dramatic rate, with worldwide revenue reportedly rising from US\$8.5 billion in 2004 to US\$10.9 billion in 2005 (eMarketer, 2005), with no end in sight. The involvement of youth in online gaming appears to be increasing, with recent prevalence studies reporting 6% to 9% of high school students (McBride, 2006; Rainone & Gallati, 2007) reporting to have gambled for money on the Internet in the past year. This demonstrates an increase from 3.6% in 2005. Additionally, over half of those surveyed reporting play on “practice” sites (MacKay, 2005; McBride, 2006). Adolescents who bet online are more likely to be problem gamblers, have lower grades, engage in delinquent activities, abuse alcohol and illicit drugs, and take medication for depression and anxiety (MacKay, 2005). In addition to the apparent increase in adolescents gambling online for money, the high use of practice sites is of considerable concern as, relative to money sites, these have an over-inflated payout rate (Griffiths & Parke, 2004; Sevigny, Cloutier, Pelletier, & Ladouceur, 2005), which may lead youth accustomed to winning to switch to the money sites, where they do not experience the same success. There is evidence to suggest that the possibility to play without money makes games more attractive, reduces barriers to play, and may undermine attempts to quit (Blaszczynski, Sharpe, & Walker, 2001). Furthermore, free gambling sites have been identified as fostering future gambling problems and are frequently accessed by adolescents identified as at-risk for gambling problems or already experiencing gambling problems (Derevensky, 2005).

There are some restrictions in place to regulate the advertisement of gambling sites. For example, advertising Internet gambling is considered an illegal activity by the US Justice Department (Heydary, 2005). Nevertheless, advertisements for free sites appear frequently on Internet sites as well as on television, in magazines, on billboards, and on radio stations that value and target a youth audience. While these commercials stress the fun and “educational” nature of the sites, they have been referred to as a “Trojan Horse strategy” used by online gambling companies to acquire players who will eventually transfer to the real-money gambling sites (Moses, 2006). A recent study of adolescents found that 93% had seen pop-up promotions for gambling sites and 61% had received spam gambling emails (Derevensky et al., 2007). Amongst a sample of British young adult online gamblers, 40% cited advertising and 21% cited practice games as a primary reason to gamble online (Griffiths & Barnes, 2007). Advertisement for both gambling Web sites and practice Web sites should be subject to the same regulations described for advertisement of gambling products. In addition, free or practice sites should be prohibited from containing advertisements and direct links to online gambling sites and should have the same payout rates as actual gambling sites.

M-gaming

In addition to online gambling, wireless technology is increasingly being utilised as a vehicle by which to gamble, and some have predicted the mobile gaming (M-gaming) market to reach US\$23 billion by 2011 (Juniper Research, 2006). Young users are primed for M-gaming and at heightened risk for excessive use, as they are well familiar with the technology (which incorporates video-game graphics), and currently download content to their mobile phones. It is a relatively easy transition from playing games that are free to playing games involving money or from paying money for a ringtone to buying a lottery ticket or placing a bet. Marketing of M-gaming to young people could result in instances of problem gambling where youth spend more than they can afford, chase losses, and increase amounts wagered. Already many adolescents experience financial difficulties arising from excessive mobile phone use (Australian Communications Authority, 2004; Griffiths & Renwick, 2003), and schools report that inappropriate use of mobile phones during classes is leading to increased distraction and disruption amongst students, thus reducing educational outcomes (Hill, 2000). Given the difficulties in regulating the age of individuals using mobile phones to gamble, efforts need to be taken to restrict wireless gaming companies from marketing to youth. Online and wireless gambling companies should be prohibited from advertising via SMSⁱ alerts to mobile phones.

Content and features of gambling advertisements

Misleading content of advertisements

In reports by the Canadian National Council for Welfare (1996) and the US National Gambling Impact Study Commission (1999), researchers were particularly troubled by the large number of gambling advertisements that were deceptive or misleading, with little or no reference to the actual odds of winning. There is ample research suggesting that children and adolescents learn more about alcohol from television and advertising than from such other sources as family and schools, leading them to be more knowledgeable about brands of beer than potential health risks associated with drinking (Austin & Nach-Ferguson, 1995; Johnston, O'Malley, & Bachman, 1996; Wallack, Cassady, & Grube, 1990). It is reasonable to extrapolate that the portrayal of gambling in the media and in advertisements has a similar effect on youth. Griffiths (2005) describes the use of advertising slogans in the UK that encourage people to think they have a good chance of winning the jackpot ("It could be you") and play upon people's charitable instinct ("Everyone's a winner"). Similar themes are found in other jurisdictions: for example, fostering thoughts of social success (Loto-Quebec's advertising slogan "It pays to be nice to people who play 6/49") or emphasising luck over hard work (New York Lottery's "All you need is a dollar and a dream" and Massachusetts's State Lottery's slogan "Work is nothing but heart-attack-inducing drudgery"; Griffiths, 2005). These advertisements encourage irrational beliefs commonly held by youth who view a near loss as a near win (Kassinove & Schare, 2001) and are misleading as they suggest the probabilities of winning are greater than they are.

Gambling is also presented as an alternative to hard work and sensible investing, and instead promotes luck, instant gratification, and entertainment (e.g., New York's "All you need is a dollar and a dream" advertisement; Griffiths, 2005). The use of marketing campaigns promoting gambling as a way of securing an ideal, easy, immediate future has been viewed as particularly dangerous when viewed by youth who may neglect other important pursuits, including employment and academic studies, to gamble (Griffiths, 2005; National Gambling Impact Study Commission, 1999).

The National Gambling Impact Study Commission (1999) concluded that messages in lottery advertisements were oriented towards particularly vulnerable segments of the population, specifically youth. This is confirmed by research showing that 33% of adolescents perceived that they were the primary target of gambling commercials, while others noted that promotions target youth as future participants in gambling activities (Derevensky et al., 2007). Numerous advertisements portray gambling as a glamorous lifestyle, filled with excitement and a sense of fantasy. These images can lure individuals by convincing them that a sensational and successful lifestyle is easily achieved through gambling.

Although adolescents possess the cognitive abilities to comprehend and evaluate advertising, at this developmental stage they are more persuaded by the emotive content of commercials that play into their concerns regarding appearance, self-identity, belonging, and sexuality (Story & French, 2004). Evidence of adolescents' cognitive processing of advertisements is shown in research findings suggesting that although many adolescents report being aware that messages promoted are unrealistic, they are still heavily influenced by them (Derevensky et al., 2007). Korn (2005) reported the messages adolescents perceived from marketing campaigns are that gambling is enjoyable and entertaining, it is easy to win, anyone can win, it is rewarding and life-changing, and it benefits society. The motivations reported as leading youth to gamble — fun and excitement, possible financial gain, lifestyle or status attainment, and a way to facilitate socialising — directly paralleled the messages obtained from advertisements.

Given that both alcohol and tobacco advertisements have been shown to considerably influence adolescents' smoking and drinking behaviours, attitudes, and intentions (Grube & Wallack, 1994; Hastings & Aitken, 1995; Villani, 2001), it may well be that gambling advertisements are similarly effective. Furthermore, it is important to consider the developmental aspects that influence the way children and adolescents understand and comprehend advertisements. Multiple studies have documented that young children have little understanding of the influential objective of advertising (John, 1999; Kunkel & Gantz, 1993; Strasburger, 2001). Young children (below the age of eight) typically view advertising as fun and entertaining and do not consider the possible biases of the information presented (John, 1999). Given their level of cognitive development, young children are particularly vulnerable to misleading advertisements (John, 1999).

Preteens, from the ages of 8 to 10 years, possess the cognitive ability to process advertisements, but they do not necessarily do so (Strasburger, 2001). Developmentally, during early adolescence (aged 11 to 12 years), children's thinking becomes more multidimensional, involving abstract and concrete thought; however, as previously mentioned, adolescents' ability to make reasonable and appropriate judgments is heavily influenced by emotional and developmental concerns (Story & French, 2004). To ensure that individuals can make fully informed, sound decisions, it is essential that gambling advertising and marketing campaigns provide accurate information about the product, are not deceptive or misleading, portray a balanced image of the product including risks involved, and are "legal, decent, honest and truthful" (Advertising Association, 2002). To achieve this, advertisements for gambling products must contain accurate information regarding the chances of winning and a visible warning statement that highlights the potential risks associated with excessive gambling, similar to warnings mandated for cigarettes and alcohol.

Regulations have been enacted in many jurisdictions to regulate alcohol advertisements. For example, in Ontario, alcohol advertisements cannot imply that drinking is important for social or business success, athletic prowess, sexuality or sexual opportunity, having fun, or achieving a goal (AGCO, 1994). Consistent with such regulations, gambling advertisements should be prohibited from containing images or sounds that may entice youth to gamble. Certain sounds and images, including the sound of coins falling in slot machines and music indicating other individuals are winning, have been associated with initiation and maintenance of gambling sessions by creating the illusion that winning is more common than losing (Griffiths & Parke, 2005). Images of individuals possessing or playing with large amounts of cash (e.g., Oz Lotto's advertising campaign includes the slogan "You could win a truckload of money" portraying a large truck filled with cash) are not an accurate depiction of the outcomes of winning and are particularly misleading for youth who may not understand the financial consequences of winning, including possible taxes, lump sum versus periodic payments, and the reality that many lottery winners do not manage their winnings well, with a significant number losing their winnings and encountering financial problems (including bankruptcy) within 5 years (St. John, 2002). Gambling advertisements should not contain images or sounds of money or excessive spending.

Advertising that appeals to children

The literature on alcohol advertising suggests that there are specific characteristics of alcohol marketing campaigns that particularly appeal to youth, including the use of animals, animated characters, celebrity endorsers, and youth-oriented music (Wyllie et al., 1998). Similar marketing techniques are employed in other industries. For example, food advertising utilising cartoons known by children has been shown to be effective in stimulating children to ask for that particular food (Fisher, Schwartz, Richards, Goldstein, & Rojas, 1991; Kotz & Story, 1994; Leiber, 1988). Likewise, in the 3 years following the introduction of the cartoon character Joe Camel, preference for Camel cigarettes increased from 0.5% to 32% amongst adolescent smokers (Perry, 1999). It is reasonable to assume that gambling products marketed using cartoons, popular children's board games (e.g., *Monopoly*, *Scrabble*, and *Battleship* scratch lottery tickets), children's

television shows (e.g., scratch lottery tickets featuring the *Jetsons* and the *Flintstones*), or other motifs attractive and familiar to children may increase the allure of these products, thus prompting children to request or obtain these products themselves. This type of marketing is particularly concerning, as scratch lottery tickets are reportedly the most desired and popular gambling activity amongst youth and have been associated with gambling-related problems in Europe and the UK (Fisher, 1999; Johansson & Göttestam, 2003; Wood & Griffiths, 2001). Furthermore, a large proportion of youth do not view scratch tickets or lottery draws to be a form of gambling, and despite legal age restrictions the majority of youth find it easy to acquire tickets (Felsher et al., 2004).

The successful marketing of gambling products towards youth is supported by preliminary findings that adolescents are particularly attuned to gambling advertisements, for which they have high levels of recall (Derevensky et al., 2007). These results are consistent with a New Zealand study that showed younger people (aged 25 years or less) are considerably more likely to recall gambling commercials than older people (over 65 years) and a Canadian study demonstrating that the majority of youth can recall multiple gambling advertisements (Amey, 2001; Felsher et al., 2004). When considered in light of findings that individuals who recall gambling commercials are more likely to engage in gambling activities (Amey, 2001), these studies suggest that gambling advertisements have a significant impact on children and adolescents, influencing their thoughts, attitudes, and behaviour. Given the previously described limits on the ability of children and adolescents to critically evaluate advertising, youth-oriented graphics including animals and cartoons; music; celebrity promoters; and youth themes such as board games and “being cool” should not be used to market or advertise gambling products. Furthermore, gambling advertisements should not include or depict any individual who is or appears to be under the age of 25, in order to prevent youth from relating to individuals gambling or winning.

Conclusions

The problems associated with youth gambling are becoming increasingly apparent and accepted by society. This recognition by key stakeholders is demonstrated by laws prohibiting minors from engaging in gambling activities. The impact of advertising and marketing techniques on youth has also been recognized in the fields of alcohol and tobacco and, subsequently, advertising is monitored in these domains. Similarly, and in accordance with laws regarding gambling by minors, regulations are needed to ensure advertisements for gambling products do not target or unduly influence children and adolescents.

Regulation of gambling and adherence to socially responsible codes of conduct are complicated by the increasing revenue gambling generates for governments and corporations, either through high rates of taxation or direct ownership. Currently, guidelines for responsible marketing of gambling products are largely voluntary. Unfortunately, in many jurisdictions there exists no arms-length safety net between government regulatory and revenue boards. To ensure that gambling advertisements do

not adversely affect youth, it is essential that regulations for gambling advertisements be made mandatory and enforced by an independent body that is not involved in the revenue generated by gambling.

A major barrier to the creation of effective and socially responsible policy regarding marketing of gambling products is the lack of empirical research in this field. It is recommended that funding and resources be provided and efforts continue to study the impact of gambling advertisements on youth. Furthermore, continual evaluations should be conducted of existing and newly implemented marketing techniques to ensure that promotions of gambling products are not unduly targeting youth or increasing the risks of gambling amongst youth. Despite the difficulties involved with regulating gambling advertisements, from a public health perspective it is essential that efforts be made to protect youth from gambling-related harm.

Based on the empirical evidence to date, the following guidelines are recommended to regulate marketing of gambling products to reduce the impact of this advertising on youth and protect this vulnerable population from harm.

- Gambling advertisements should not be permitted to be shown during television and radio timeslots primarily accessed by children or adolescents or advertised where they may be frequently viewed by youth, including on billboards, on public transport, and in print publications where a prominent proportion of readership are minors.
- Given the influence of point-of-sale advertising on children and adolescents, it is recommended that these advertisements be restricted from display in all stores entered by minors.
- Companies and trusts that principally generate their revenue from gambling should be banned from promoting or advertising their name or products, including naming rights, branding, and logos through the sponsorship of sporting teams and events.
- Products promoting gambling or gaming companies should not be manufactured in child sizes, be available for purchase by minors, or be given away in promotions or as prizes.
- Gambling corporations should be restricted from utilising product endorsements from individuals who are likely to appeal to youth and increase the likelihood of youth gambling involvement.
- Advertisement for both gambling and practice Web sites should be subject to the same regulations described for advertisement of gambling products. In addition, free or practice sites should be prohibited from containing advertisements and direct links to online gambling sites and should have the same payout rates as their actual gambling site.
- Online and wireless gambling companies should be prohibited from advertising via SMS alerts to mobile phones.

- Advertisements for gambling products must contain accurate information regarding the chances of winning and a visible warning statement that highlights the potential risks associated with excessive gambling.
- Gambling advertisements should not be allowed to include images or sounds of excessive spending.
- Youth-oriented graphics, including animals and cartoons, music, celebrity promoters, and youth themes such as board games, and being cool, should not be used to market or advertise gambling products.
- Gambling advertisements should not include or depict any individual who is or appears to be under the age of 25, to prevent youth from relating to individuals gambling or winning.
- Regulations for gambling advertisements should be mandatory, enforced, and continually evaluated by an independent regulatory body.

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ⁱ Short message service (SMS): allows the interchange of short text messages between cellular phones.