

INFORMED CHOICE AND GAMBLING: PRINCIPLES FOR CONSUMER PROTECTION

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It is well-established that problem gambling results, in part, from erroneous perceptions about the probability of winning. While individuals retain the ultimate responsibility over gambling choices and level of participation, optimal decision-making depends, among other factors, on the availability of reliable, comprehensive information. From a public health perspective, the gaming industry, in collaboration with government and the community, must ensure that individuals receive sufficient information to enable them to make responsible gambling choices. This paper reviews key decision-making models and posits four primary goals that will lead to optimal choices in gambling: (a) the provision of relevant and objective information; (b) elucidation of the benefits of responsible gambling as well as potential social and personal costs of excessive gambling; (c) additional materials targeted to specific gambling subgroups; and (d) the use of a variety of communication mediums to disseminate materials. Implications for further research and public information campaigns are discussed.

Keywords: Informed choice, gambling, problem gambling, decision-making, responsible gambling

INTRODUCTION

Gambling is a multi-billion dollar industry. While the majority of adults gamble responsibly, approximately 1% to 2% gambles to excess resulting in significant personal, familial, social and legal repercussions (Petry, 2005). As a consequence, the gaming industry and governments have adopted or legislated for responsible gaming codes of conduct or regulatory requirements to minimize the public health implications of problem and pathological gambling. In this and the wider public health context, there is continued heated debate, often fuelled by ideological or philosophical perspectives, as to the relative roles played by individuals, industry and governments in consumer protection.

Uninformed, careless or reckless behavioural life-style choices have the capacity to adversely affect public health and individual rates of morbidity and

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mortality (Leichter, 2003). The position implicit in democratic societies that value civil liberties is that individuals are assumed to retain primary responsibility over decisions affecting their health and future, and accountability for their subsequent actions and outcomes. Accordingly, public health initiatives aim to better inform individuals to increase their capacity to make reasoned and rational choices that promote healthy life-styles and recreational activities (Leichter, 2003). This philosophy characterises preventative initiatives for alcohol and tobacco-related problems, where education and persuasion strategies are among the most popular applied public health approaches, adopted with variable effectiveness (Babor *et al.*, 2003). Despite these initiatives, it is well known that information alone does not necessarily improve decision-making. There is, therefore, a need for more research to identify optimal strategies for providing information in a medium and method that best facilitates individual choice.

The primary objective of this paper is to clarify the issue of personal responsibility and the role of industry in providing relevant and sufficient information for informed decision-making. At the outset, we want to emphasise that information alone does not alter behaviour. Similarly, we do not believe that public health information campaigns are the *single* best approach to responsible gambling, or that sole responsibility resides with the individual. Rather, we suggest that information provided to participants represents the basic platform upon which other multifaceted initiatives may be built. This paper will establish a set of principles to guide and enhance informed choice.

To avoid potential misinterpretation, it is important to re-emphasise that the goal of this approach is not to place the burden of responsibility solely on the individual while abrogating responsibility on the part of commercial product or service providers. Rather, providers retain responsibility for their decisions and actions just as individual consumers are responsible for their behaviour: Those who provide and promote products and services to consumers retain an obligation to fully inform individuals of the potential risks, foreseeable consequences and implications of their actions.

THE RELEVANCE OF THE RENO MODEL

One proposed framework for addressing the balance between personal, community and industry responsibility is the Reno Model, a position paper outlining the principles and strategic framework for responsible gambling (Blaszczynski, Ladouceur, & Shaffer, 2004). Blaszczynski *et al.* (2004) formulated this framework to assist gaming operators, regulatory agencies, health and welfare workers and community members to develop a systematic applied approach to gambling. As one of its core elements, the Reno Model argued that a science-based approach should form the foundation for effective socially responsible public policies designed to protect consumers, minimise social harm, and maintain a sustainable gaming industry.

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Two fundamental principles of the Reno Model are personal responsibility and choice in gambling-related decision-making. The basic premise underlying these principles is that the ultimate decision to gamble resides with an individual and represents a choice. To make optimal choices, individuals must have the opportunity to be fully informed of the set of alternative choices available to them; however, on its own, informed choice does not guarantee that decisions made will be optimal. Everyone needs to recognise that even though they have the necessary and sufficient information, individuals might still make poor decisions for a variety of reasons.

In addition, many extraneous factors (e.g., depression, anxiety or other disorders) can influence an individual to make poor decisions. However, such factors do not diminish the need to provide relevant information nor do they eliminate an individual's inherent capacity to evaluate information. Rather, information is the basic foundation for informed choice: Factors influencing how or why an individual makes a certain choice should be regarded as important related issues that require separate strategies for intervention.

The Reno Model proposes that both the gambler and the industry assume primary responsibility for acting in a manner that promotes and fosters responsible gambling behaviour within the scope of government regulations and community expectations. In addition, governments are responsible for providing regulatory control and setting the parameters under which gambling can be offered as a product that takes into account consumer protection. Optimally, those regulations should be designed to minimise paternalism and excessive personal intrusion. The primary responsibility of the gaming industry is to provide information to meet the conditions of informed choice and not to mislead, exploit or take advantage of gamblers. Similarly, individuals are responsible for ensuring that they are fully informed and select choices that are appropriate to and within their preferences, circumstances, and financial and social limits. In other words, the industry must provide all relevant, pertinent and available information in a timely manner. Individuals will process and use this information to decide if they want to gamble or not. If they decide to gamble, they can use the information to assist in establishing their gambling limits.

There are significant differences in opinion and debate related to consumer protection and information, impaired control, and the influence of psychological/emotional factors that may interfere with decision-making. The objective of continued vigorous debate is to achieve a reasonable balance between individual and industry obligations in promoting responsible gambling.

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Informed choice is one important cornerstone of responsible gambling. Measures that promote informed choice are designed to meet the mandate of consumer protection by targeting the population as a whole rather than simply restricting at-risk or current problem gamblers.

From a commercial perspective, the gambling industry offers and markets various forms of products that represent an opportunity for individuals to gamble. Individuals retain the right to choose whether or not to gamble. If they choose to participate, ideally, they will decide to gamble responsibly, that is, within their means with respect to expenditure and time on a majority of occasions (Australian Gaming Council, 2004; National Research Council, 1999; Petry, 2005; Productivity Commission, 1999).

Studies support the notion that a majority of those who gamble do so responsibly and without problems (National Research Council, 1999; Petry, 2005). Fewer than 2% of the population across a variety of international jurisdictions evidence gambling-related problems that meet diagnostic criteria (Petry, 2005). But, at times, some individuals make gambling choices that are not in their best interest. Recreational gamblers may occasionally gamble more time or money than they intend; despite their recreational status, they occasionally 'chase losses' resulting in the presence of some degree of harm. This circumstance can create minor and transient harm for them.

Some people will make bad decisions as a result of errors in beliefs related to their perceived likelihood of winning and recouping losses (Ladouceur, Sylvain, Boutin, & Doucet, 2002). But even under those isolated or, at times, repetitive circumstances, gambling more time and money than intended does not necessarily reflect impaired control; rather it is the outcome of a series of poor decision-making and/or ill-informed choices. In this regard, self-regulation, self-control or controlled behaviour reflect an individual's capacity to formulate goals and adjust behaviour in response to circumstances and information that allows that individual to pursue a planned course of action (Marsh & Dale, 2005). As a corollary, poor decisions are partially predicated on the inadequate availability of information from which to choose options: Informed choice, therefore, is a fundamental requirement for optimal decision-making.

There are three basic strategic principles that underlie informed choice:

- (a) Individuals are personally responsible for their level of participation in gambling;
- (b) Informed choice is a pivotal requirement for responsible gambling; and
- (c) Science, in part, can contribute to determining which information is necessary to promote informed choice in gambling.

The objective of informed choice is to provide relevant, available, and timely information to all segments of the community including children and youth, with the aim of empowering them to understand the concept of gambling and what it represents, and to assist them in making appropriate decisions that are not based on faulty information or mistaken beliefs or attitudes.

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GUIDELINES FOR INFORMED GAMBLING CHOICES

The Independent Pricing and Regulatory Tribunal (IPART, 2004) of New South Wales identified three elements essential to promoting a culture of responsible gaming: (1) promotion of informed choice for the community; (2) improved measures to protect gamblers; and (3) more effective and efficient counselling services. Informed choice refers to a reasoned decision made by an individual within the context of having understood the necessary information in the absence of coercion, influence or inducement.

Many members of the general community hold substantive myths and erroneous beliefs about gambling behavior and its outcomes (Ladouceur *et al.*, 2002; Toneatto *et al.*, 1997). These misperceptions are common across the gambling spectrum, among social and occasional gamblers as well as among problem and pathological gamblers. They range from mistaken beliefs that the outcome of electronic gaming machines are determined by set programs rather than random number generators to misperceptions that operators manipulate payout rates instead of understanding the meaning of 'expected player return rate' to misunderstandings related to the concept of randomness. Few gamblers are aware of the configuration of payout schedules and volatility of electronic gaming machines, with many believing that skill and/or following systems of wagering will improve their chance of winning.

From a cognitive theory perspective, misunderstanding the nature of probabilities and the fundamental concept of mutual independence of events, overestimating the likelihood of winning, and experiencing illusions of control and other erroneous beliefs lead to the persistence of gambling and the emergence of problem gambling (Gaboury & Ladouceur, 1989; Walker 1992). Cognitive theory maintains that identification and correction of erroneous beliefs, coupled with an increased understanding of the notion of randomness, form the central mechanism governing effective treatment approaches for impaired control (Ladouceur & Walker, 1996). Accurate information is crucial not only in the treatment of problem gamblers, but also to the prevention of problem gambling. This is not to suggest that erroneous perceptions or processes are unique to, or account for, all decisions related to gambling frequencies and intensities. Other psychological factors might play a significant role in maintaining the behaviour. The basic premise is that cognitive factors are pre-eminent in any decision to initiate gambling and these, in total, represent a primary cause that influences decision-making and, consequently, patterns and intensity of gambling.

Both the Independent Pricing and Regulatory Tribunal of New South Wales (IPART, 2004; p.29) and the Reno Model (Blaszczynski *et al.*, 2004) adopt informed choice as the basic tenet of a responsible gambling policy framework. However, informed choice is only possible if industry and government exercise an appropriate duty of care by providing *all* of the relevant and available information necessary to assist gamblers so they can freely choose among gambling options after fully considering the implications and consequences of

various levels of gambling involvement. Consistent with a public health approach, informed choice applies to the general population and includes the full spectrum of participation from non-gamblers through to problem gamblers.

Although the term “informed choice” has been discussed in various contexts such as elective surgery and medical treatment, family planning and healthy eating styles, there are few operational definitions of the concept and its guiding principles. The Independent Pricing and Regulatory Tribunal (IPART, 2004) refers to a process in which choices relating to the purchase or consumption of a product are made on the basis of adequate information about foreseeable consequences.

There are two basic requirements that must be present for informed choice to occur: competence and disclosure. First, the individual must be able and competent to make a reasoned decision based on information provided. Second, the individual must be fully aware of the characteristics, operations and nature of the product to be used including any potential risk, implications or consequences that may arise as a result of consuming that product. (IPART, 2004). In addition, the informational basis for informed decision-making must be: (a) relevant to the product; (b) accurate in content; (c) not misleading or deceitful in any form; (d) accessible to all potential participants; (e) provided in an understandable form; (f) provided in full, that is, with no pertinent information missing; and (g) delivered in a timely manner.

From a public health perspective, the provision of relevant information is fundamental to the principles of primary prevention. To prevent morbidity (i.e., illness/problems) by reducing modifiable risk factors among gamblers, the information must target people who do not show signs of illness. Optimal proactive primary prevention strategies should require informing and educating the general population about the nature and characteristics of gambling as well as reasonable expectations about gambling outcomes.

SUFFICIENT AND NECESSARY INFORMATION FOR INFORMED CHOICE

To date, there has been no systematic research focusing on the concept of informed choice in gambling or the type of data necessary to facilitate healthy decision making. In Australia, the IPART report maintained that either the general community or gamblers in particular must have “accurate, clear and accessible information” necessary to assist them in making “informed choices about whether they will gamble and how they will gamble” (IPART, 2004, p. 37). Such information should aim to:

- Increase awareness of risks associated with gambling;
- Increase understanding of how gambling products work and the probability of winning a prize;
- Encourage responsible gambling practices;

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- Help people recognise problem gambling behaviours;
- Inform and educate people about the assistance available for those experiencing gambling problems; and
- Increase the application of responsible behaviours.

After evaluating existing and proposed harm minimization measures in light of these guidelines, the Tribunal determined that gaming venues should display the monetary value of credits, erect signs displaying probabilities, advertise the issue of problem gambling, tighten controls on advertising gambling products, display responsible gambling signage in venues and on gambling products, publish informational brochures on self exclusion and counselling programs, and display clocks in venues. In addition, the Tribunal proposed introducing contact cards for counselling services and displaying periodic messages on electronic gaming machines. However, the nature and extent of what information is necessary, sufficient or relevant was unspecified and thus remains uncertain, in part because there are little or no evidence to suggest that these proposals will yield the intended results. In addition, like other public policy making, these proposals include the risk that possible unintended adverse consequences might result.

It is also important to consider the optimal means of providing information to individuals and the aim of the message that is to be conveyed. Not all individuals will use information provided; some will avoid it, others will dismiss or deny it. Although there is no universal empirically supported way to convey a message, two basic elements should be employed: (a) short concise messages; and (b) repeated presentations of such messages.

To obtain a desired outcome, the content of messages should inform players about the probabilities of winning or encourage the need to exercise caution in play: “You cannot control the outcome of games of chance,” “There are no lucky days: It’s just a game of chance,” “Do not gamble more than you can afford,” or “Gambling is entertainment, not a way of making income.” We can classify information that influences attitudes that, in turn, determine gambling choices into four broad categories:

- Information that warns gamblers that potential risks and harm may be associated with gambling;
- Information that informs players of the operation and characteristics of games, probabilities of winning, and the role if any that skill may play in games where outcome is determined by chance;
- Information that fosters responsible gambling practices; and
- Information designed to assist gamblers in monitoring levels of expenditure in terms of time and money.

Variations in the type of gambling activity and characteristics associated with the gambling venue will dictate different options for providing necessary information. For example, Sportingbet Australia has suggested that Internet

bookmakers could best facilitate decision-making by: (a) displaying accurate information about odds and approximate dividends and payouts on the website; (b) providing clearly-worded information about rules related to bet types; (c) providing information regarding the warning signs of problem gambling; (d) diligently policing the exclusion of minors; and (e) refraining from “misleading or deceptive” advertising, particularly in relation to winning (Sportingbet.com, 2005). In contrast, informed decision-making at venues with gaming machines might necessitate precise explanation of the role and impact of reel spin, near wins, virtual versus “real” reel and other mechanical aspects of machine operation to dispel erroneous perceptions about the odds and probabilities of winning.

THE IMPACT OF GAMBLING-RELATED PROBLEMS ON INFORMED CHOICE

Assuming that gambling venues opt to provide sufficient explanatory information, it is also important to determine whether the presence of gambling-related problems affect the capacity to make informed choice or remove personal responsibility. When gambling stimulates a subjective state of excitement, dysthymia, depression or desperation, individuals might repeatedly make poor decisions; further, their capacity to control their behaviours can become increasingly weakened under these conditions. Some psychological theories attempt to explain such poor behavioural control through processes that are linked to affective (mood) self-regulation and/or impulsivity (Nower & Blaszczynski, 2006; Tice, Bratslavsky, & Baumeister, 2001). In such theories, behaviours are pursued at the expense of longer-term benefits because of their capacity to regulate current states of emotional distress or tension. As a result, emotional distress leading an individual to gamble, or gambling-related problems arising out of excessive gambling decisions, represent mitigating circumstances that explain the motivation for why an individual acted in a specific way.

Acknowledging the difficulty that emotional factors may have on impulse control even under these conditions, individuals nevertheless retain the ultimate responsibility for their decisions and actions. This position holds for a range of impulsive behaviours that have the potential to become excessive, including, compulsive shoplifting, aggressive outbursts, and aberrant sexual behaviours such as rape, pedophilia, and exhibitionism.

DECISION-MAKING STRATEGIES AND THEIR IMPACT ON BEHAVIOUR

Currently, there are no clear guidelines to determine what necessary and/or sufficient information is required to satisfy gambling-related informed choices. Information alone forms only a part of the decision-making process relating to behavioural choices with attitude serving as an important mediating

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factor between knowledge and choice. Attitudes determine what information is selected and filtered out, and information affects attitudes. Within this feedback cycle, both attitudes and information form a critical link in decision-making processes. Social and marketing factors influence attitudes. However, information remains a crucial element in making optimal decisions. Even when scientifically-derived and objective information is available to decision-makers, they will process, filter and interpret this information through their attitudes and personal characteristics (e.g., personality).

The concept of informed choice has served as the basis for numerous public health marketing campaigns world wide for more than 30 years. These campaigns have assessed the relative effectiveness of peer and formal education, group support and other informational strategies designed to increase or decrease participation in specific behaviours. Consistent with this, theoretically-based studies of informed choice have found a positive relationship between an individual's perception of severity of illness, susceptibility to complications and beliefs related to the efficacy of treatment and informed choices regarding health behaviors: breast self-examination (Manfredi, Warnecke, Graham, & Rosenthal, 1977; Norman & Brain, 2005); compliance with diabetic treatment regimens (Cerkoney & Hart, 1980), antihypertensive therapy (Inui, Yourtee, & Williamson, 1977), and condom use (Mashegoane, Moalusi, Ngoepe, & Peltzer, 2004).

Findings from these and similar studies are based on widely accepted health theories with important implications for informed choice measures in gambling. These include the Health Belief Model (Janz & Becker, 1984; Rosenstock, Strecher, & Becker, 1988), Social Cognitive Theory (Bandura, 1986, 1997), Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), and Transtheoretical Model of Behaviour Change (Prochaska & DiClemente, 1982, 1983).

Both the Health Belief Model and Social Cognitive Theory propose that individuals will only decide to perform a recommended behaviour if the benefits of performing the behaviour outweigh the costs. The Health Belief Model maintains that individuals must also believe they are at risk for engendering serious adverse consequences should they decline to perform the behaviour (Janz & Becker, 1984). Social Cognitive Theory reasons that individuals must also have a sense of personal efficacy, that is, they must believe they are capable of performing the behaviour despite obstacles and barriers (Bandura, 1986, 1997). As an example, these theories suggest that individuals who decide to limit their gambling do so because they believe that the adverse consequences associated with gambling (e.g., inability to pay bills, strife at home) outweigh the benefits (e.g., socialization, relaxation), and they perceive themselves capable of limiting their gambling despite obstacles.

The Transtheoretical Model of Change (Prochaska & DiClemente, 1982, 1983) also highlights the benefits of self-efficacy in decision-making. This model maintains that personal change is a process, largely determined by

individuals' willingness to change and confidence in their ability to be successful. The stages of change are: (a) pre-contemplation – no plans to alter behaviour; (b) contemplation – desire to change but no formal plans; (c) preparation – taking steps toward beginning change; (d) action – effort to change; and (d) maintenance – managing the tendency to lapse or relapse to the original undesirable behaviour or a variant of that behaviour. As with the other aforementioned models, the Transtheoretical Model maintains that behavioural decision-making is dependent on an analysis between the costs and benefits of continuing the present behaviour versus adopting new behaviours. Though evaluation of costs and benefits are both important in the decision-making process, research has indicated that focusing educational messages on positive by-products of discontinuing behaviour are a stronger predictor of change than those stressing the negatives (Prochaska, 1994).

The final key variable in the process of change is intention. An individual's intention largely determines the successful performance of a particular behaviour (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Those intentions, in turn, depend on the individual's attitude toward the behaviour (i.e., the extent to which they believe that performing the behaviour will lead to positive outcomes) and/or the dictates of social norms (i.e., the extent to which one's social support network endorses the behaviour, the individual's desire to please the members of that network). Therefore, in deciding to gamble within reasonable limits, gamblers require sufficiently persuasive information to convince them that they should not view gambling as an income-generating activity; furthermore, a gambler's peer and other support groups should share this view to strengthen the capacity to discourage excessive gambling.

Taken together, these models suggest that a successful plan for informed choice in gambling should accomplish four primary goals. First, it should provide the relevant educational information necessary to evaluate gambling options objectively and to modify erroneous cognitions that lead individuals to view gambling as an income-generating behaviour rather than as entertainment. Second, that information should detail the benefits of responsible gambling as well as the potential social and personal costs of excessive gambling and provide sufficient guidelines to assist individuals in identifying their current level of responsible gambling. Third, the information should target specific gambling activities, socio-demographic groups, and stages of change, such that any individual could feel confidently informed about gambling options. Fourth, information providers should convey content by using several mediums to ensure schooling most or all members of an individual's social network about the realities and parameters necessary for making an informed gambling choice. And, finally, content should address erroneous cognitive perceptions that perpetuate problem gambling behavior.

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**COGNITIVE INTERVENTION: THE KEY COMPONENT
OF INFORMED CHOICE IN GAMBLING**

Given that behavioural choice depends largely on intention, attitude, self-efficacy and evaluation, then it is crucial for any informed choice program in gambling to target faulty cognitions. Studies have shown that a majority of problem and pathological gamblers gamble to excess in large part because they harbor a variety of cognitive misconceptions, including erroneous perceptions, irrational belief schemas and misunderstanding of randomness, mutual independence and probabilities, which lead to the misattribution of causal connections between chance events and unrealistic estimates of the likelihood of winning (Ladouceur *et al.*, 2002; Ladouceur & Walker, 1996; Toneatto *et al.*, 1997; Walker, 1992; Sylvain, Ladouceur, & Boisvert, 1997). Toneatto *et al.* (1997) and Ladouceur and his colleagues (Ladouceur, Gaboury, Dumont, & Rochette, 1988; Gaboury & Ladouceur, 1989) have consistently found that up to 80% of problem gamblers seeking treatment described a range of irrational verbalization or cognitive distortions. For this reason, it is important for an informed choice protocol to target information to address and dispel these misconceptions so that gambling choices will be based on realistic perception that gambling is a form of entertainment rather than a means of income generation.

The primary cognition underlying problem gambling is the misconception that one can win on a long-term basis (Felscher, Derevensky, & Gupta, 2004; Ladouceur, Sylvain, Boutin, & Doucet, 2003). For example, in a study of problem and non-problem VLT players, Ladouceur *et al.* (2003) found that 81% of problem gamblers as compared to 68% non-problem gamblers reported erroneous perceptions of the probabilities of winning before and 41% versus 27% during play. This finding suggests that such perceptions encourage players to chase losses in response to the gambler's fallacy, the notion that the longer one plays, the more likely s/he is to win. It is notable that a sizeable percentage of both groups reported erroneous perceptions, highlighting the need to tailor informed choice information to common misconceptions.

In addition to the gambler's fallacy, empirical evidence suggests that problem gamblers differ from recreational gamblers on a wide variety of characteristics, broadly categorized into those related to personal skill and judgment (e.g., illusions of control: Langer, 1975), ability to influence outcomes (e.g., superstitious rituals and beliefs: Joukhador, Maccallum, & Blaszczynski, 2004), selective recall and biased evaluation of outcomes (e.g., Gilovich, 1983; Gilovich & Douglas, 1986), and erroneous perceptions regarding randomness and the independence of events (e.g., Gaboury & Ladouceur, 1989; Coulombe, Ladouceur, Desharnais, & Jobin, 1992; Walker, 1992). Toneatto *et al.* (1997) reduced 13 such identified cognitive distortions into five clusters under three similar higher-order categories: control, reframing, and prediction.

Research suggests that optimal informed choice protocols should target erroneous beliefs regarding randomness that lead to the development illusions of control over outcomes that underlie futile strategies and skill-based efforts

to increase winnings (Benhsain, Taillefer, & Ladouceur, 2004; Ladouceur *et al.*, 2003; Sylvain *et al.*, 1997).

PROPOSED COMPONENTS OF AN INFORMED CHOICE CAMPAIGN IN GAMBLING

This paper is not intended to describe in detail the specific content and delivery of information required for individuals to make informed choices about their gambling. Such a description would require outcome-based research to evaluate (a) the relative effectiveness of particular messages and modes of information dissemination tailored to individual venues with prescribed forms of gambling, and (b) the relative effectiveness across the variety of venues that offer various forms of gambling. Rather, we suggest that the field adopt as a basic framework a three-pronged strategy for information dissemination: universal, gambler-specific, and problem-gambler specific. As outlined earlier, the principles and empirical findings derived from cognitive frameworks that take into account decision-making processes relating to behavioural lifestyle and healthy choices provide the foundation upon which these strategies rest.

1. Universal Gambling-related Information

Universal gambling-related information would include pamphlets, brochures, billboards, ads, and other methods of educating the broader public regarding the realities of gambling. This information is intended to correct erroneous beliefs about gambling. To that end, this information would:

- Educate on the nature of gambling as entertainment.
- Dispel myths that gamblers can “beat the house” with excessive gambling by explaining the realities of probability, odds, randomness, and venue-specific misconceptions.
- Provide sufficient information about specific gambling activities to allow players to set effective limits for play or modify gambling behaviour to within affordable levels (e.g., house procedures for establishing financial limits, pop-up messages on machines, materials explaining machine features such as real versus virtual reels, return-to-player, hit frequency).
- Increase awareness of the potential risks associated with excessive gambling.

2. Gambler-specific Information

Gambler-specific information would tailor educational materials to gamblers from various demographic groups. This information should provide research-based information that targets gamblers by age, gender, ethnicity, and socio-economic factors. Examples include:

- Detailed and optimally interactive information regarding specific games, such as player return rates, “real” reels versus virtual reels, and computer operation of machines.

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- Promotional materials, resources and referrals for individuals who gamble for non-entertainment reasons (i.e., due to factors of loss, loneliness, social isolation, income generation, peer support, and cultural sanction).
- Educational materials that identify gambling-related erroneous cognition and counter each belief with information (eg, illusion of control, gambler's fallacy).
- User friendly screens to promote identification of the signs and symptoms of problem gambling behaviours.
- Concise, repetitive messages to heighten self-awareness regarding expenditure and patterns of play.

3. Problem-gambler Specific Information

Finally, problem-gambler specific information would target those who are already experiencing gambling related-problems. Such measures would include:

- Assessment guidelines for determining the relative "health" of one's gambling behavior and one's relative position along the spectrum of gambling behavior.
- Resources and referrals for counseling, hotline, self-exclusion and self-help services.
- Cost related information designed to educate problem gamblers on the financial and legal risks of excessive gambling.
- Strategies for adopting gambling limits and increasing responsible gambling behaviour.

Though it is possible to offer general guidelines for informed choice, the nature and form of delivery of these choices likely will vary, depending on jurisdictional regulatory approaches to gambling products.. For example, some governmentally-owned or operated venues (e.g. Canada) have chosen to enforce a greater degree of regulation in the form of mandatory identity cards and adoption of specific strategies to limit expenditures (e.g. smart cards, removal of ATMs, tracking players who might be problem gamblers), despite the absence of conclusive empirical evidence to support their effectiveness. In contrast, jurisdictions with privately owned venues (e.g. U.S.A.) have been less likely to impose structural constraints on operators or to limit individual freedom to choose the nature and extent of gambling participation. As a result, we recommend tailoring informed choice measures to maximize the motivation for internal control over factors such as cognitions that contribute to continued play in the face of mounting losses.

CONCLUSIONS

The choice to gamble has been and remains an individual decision. However, sufficient, necessary and timely information regarding the potential

implications and outcomes associated with the decision to gamble is a basic requirement of informed choice. Within this context, informed choice is but one component of a complex process associated with gambling. It is difficult to determine which individual components of such processes need to be modified to keep gambling from emerging as a problem. Accordingly, the one solution fits all approach to preventing or treating complex behavior patterns like gambling disorders should be avoided. The principle remains that informed choice represents the important foundation and starting block upon which other interventions are based. It does not assume the total burden of responsibility is limited solely to the individual.

The gaming industry, in collaboration with government and the community, is primarily responsible for providing the requisite information to gamblers in an accessible and readily understood form. Only in the context of a cooperative partnership among industry, governments and individual gamblers can gambling stakeholders achieve the objectives of consumer protection and responsible gambling be achieved.

One cornerstone of a public health strategy that seeks to minimise the negative consequences of gambling is through education that provides the necessary information which forms the basis for informed choices. However, the amount, type, and form of information delivery needed to enhance informed choice in gambling remains unclear and inconclusive. While we can extrapolate the directions for future inquiries from the findings of the extant research in other fields of addictions and behavioural life-style changes, it is imperative that empirically-derived findings guide the gaming industry's efforts to provide gambling-related information. Consequently, it is imperative that industry and governments collaborate to provide gamblers with the sufficient and necessary information upon which individuals can base their informed choice, permitting them to guide their level of gambling participation within affordable limits.

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