# Engaging Youth About Gambling **Using the Internet**

The YouthBet.Net Website

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## **ABSTRACT**

Objective: YouthBet.net's (www.youthbet.net) goal is to prevent gambling problems among youth through an interactive, multimedia website based on a public health approach.

Participants: YouthBet.net was designed by youth for youth. A youth working group spent several months designing the look and feel of the site to ensure that it would appeal to youth aged 10-19. In total, 34 youth from the Greater Toronto Area participated in the first 3 phases of the usability testing of the site using Video Capture of User Site Interaction methodology.

Setting: Urban Toronto.

Intervention: Utilizing public health strategies such as health promotion, harm reduction and problem prevention, YouthBet.net features games, information and help resources to protect youth from gambling-related harm.

Outcomes: Youth participants indicated that they liked the interactive way gambling information was presented via realistic games and quizzes, often citing that YouthBet.net would be a fun and educational tool to be used by teachers in the classroom. Participants had no difficulties navigating the site, finding content and playing games. Additionally, all youth said that they would return to the site and would recommend it to a friend if they were having a problem with gambling.

Conclusion: YouthBet.net is one of the first comprehensive websites designed for youth gambling. Findings from this research will inform future health promotion, harm reduction and problem prevention efforts for youth gambling using Internet technology.

MeSH terms: Gambling; health promotion; adolescent; Internet

La traduction du résumé se trouve à la fin de l'article.

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oth Canada and the United States (US) have experienced a rapid increase in legalized gambling beginning in the 1990s.1 Governmentowned gambling, particularly in Canada, expanded dramatically during this time to increase government revenue without additional taxation. A major public health issue arising from this expansion is gambling by youth. Today's young people are the first generation exposed to widespread access to gambling venues, ubiquitous gambling advertising, and general social approval of gambling.<sup>2</sup> Research indicates that 60-90% of youth engage in some form of gambling activity<sup>3</sup> and problem gambling prevalence rates are 2-4 times higher than those of the adult population.<sup>4</sup> Based on a number of research reports,<sup>3,4</sup> 10-15% of youth are at risk for developing a serious gambling problem, while 4-8% already have serious problems with gambling. Risk factors such as substance abuse, depression, and problems at school, have been associated with problem gambling.<sup>2,5,6</sup>

This article describes the development of an innovative, comprehensive website for youth and gambling (www.YouthBet.net). Also, initial findings are presented from usability testing evaluations of the website. This study builds on our ongoing research into how young people understand gambling activities and gambling problems<sup>7</sup> and lays the groundwork for behaviour change research. In line with a public health perspective, the goals for YouthBet.net are to: a) promote informed and balanced attitudes, behaviours and policies towards youth gambling, b) prevent youth gambling-related health problems, and c) protect at-risk youth from gambling-related harm. Definitions related to public health and youth gambling are given in Table I, where it is useful to view gambling behaviour and related problems along a continuum.8

# PARTICIPANTS, SETTING AND INTERVENTION

# YouthBet.net development

The Internet provides innovative ways of engaging youth in health assessment and behaviour change.9-11 Since 1995, TeenNet research at the University of Toronto (www.TeenNet.ca) has focussed on using technology for engaging youth in health promotion. Youth are involved in all phases of project development through an action research model. 12 The aim is to develop websites 'with youth and for youth' that are interactive, fun and accessible with content that is highly relevant to youth.

YouthBet.net was developed involving: a youth roundtable, a youth working group, "reality checks" of the website and usability testing. As a first step, focus groups were conducted with 103 diverse youth (male and female) aged 10 to 20 across Ontario. Key findings are described in a companion article.7 A follow-up roundtable was held where 30 youth from across Ontario discussed gambling-related issues, formulated concept definitions of gambling, refined results of the focus groups, and developed metaphors for the website. A youth working group (consisting of 7) was then formed to develop and design the look, feel and content of the website. Ongoing input on the website's development was obtained from the project's five community partners\*, including organizations with gamblingrelated interests and youth-serving agencies representing the interests of youth from a variety of backgrounds in the Toronto region.

During development, two 'reality checks' were held with youth (not part of the working group) to obtain feedback for ensuring that the website is responsive to male and female youth of various ages and cultural and socio-economic backgrounds. The action research model<sup>12</sup> ensures that ongoing feedback from a wide variety of interests, including youth and community partners, is incorporated into the development of the website. Since its conception, YouthBet.net has had approximately 109,000 hits to the site, with approximately 2,000 registered users. Of registered users, 82% of youth reside within Canada.

# Website tour

Youth commonly refer to gambling as "betting". As such, the word "bet" has been incorporated into the name of the website. Youth chose a neighbourhood scene for the homepage to represent where gambling occurs in the context of their lives (Figure 1). This neighbourhood

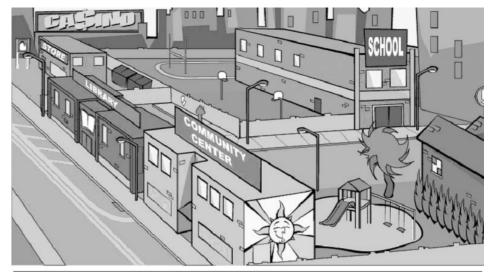


Figure 1. www.YouthBet.net homepage

# **TABLE I Public Health and Youth Gambling Definitions**

Health Promotion

Harm Reduction

Risking something of value on the outcome of an event when the probability of winning is less than certain.<sup>8</sup> Gambling Study of the distribution and determinants of gambling and related problems in a youth (aged 10-19) population and the organized Youth Gambling and Public Health measures to prevent, minimize or manage the consequences. A public health approach aims to control the occurrence and spread of gamblingrelated problems.8 Problem Gambling Determined by the SOGS-RA instrument, characterized by a youth who gambles everyday and has experienced some problems. (Level 3, with a SOGS-RA score of 4.) At-risk Gambling

Determined by the SOGS-RA instrument, characterized by a youth who gambles at least weekly and may or may not have experienced any problems. (Level 2, with a SOGS-RA score of 2 or 3.) The purpose of identifying at-risk youth gamblers is to prevent gambling problems or detect them at an asymptomatic stage of development.

Processes that enable youth to make informed choices about gambling and that foster their overall well-being by building on their assets and the capacities of family, peers and community.

A policy or program directed towards minimizing or decreasing adverse health, social, and economic consequences of gambling behaviour for youth, their families and society. Harm reduction targets individuals with moderate and severe problems. Goals include, but are not limited to, the moderation of gambling behaviour. Harm reduction recognizes the perspective that total abstinence from gambling is not the only therapeutic option.

**Primary Prevention** Avoidance of the onset of youth gambling problems and situations and reduction of the incidence of disordered gambling.
Early identification of youth with gambling problems and provision of Secondary Prevention

assistance. **Tertiary Prevention** 

Measures undertaken during specialized gambling treatment in order to prevent complications from the disorder.

reflects seven different locations where youth observe or participate in gambling on a regular basis. By clicking on the various locations, youth access five gamblingrelated areas (school yard, school, back alley, corner store, casino) and two designated for resources and help (community centre and library).

A public health perspective is incorporated through multiple interventions that address a range of gambling behaviours and problems. Interventions were designed to support youth with issues related to gambling, such as money management, time management and relationships. The

strategies and tools, summarized in Table II, are based on key health behaviour concepts, including the: health belief model,13 theory of reasoned action/planned behaviour, 14,15 social learning/social cognitive theory, 16,17 self-determination theory, 18 and trans-theoretical model.<sup>19</sup> These concepts are integrated in a Likelihood of Action index.9

Included in the "tool kit" are public health interventions on: time management, money management, general risk perception, decision-making skills, odds/randomness and probability, gambling selfassessment, and minimizing negative con-

Community partners include: the Responsible Gambling Council (Ontario), the Substance Abuse Program for African Canadian and Caribbean Youth, the YMCA Youth Gambling Project, St. Stephen's Community Centre, and Davenport-Perth Neighbourhood Centre.

TABLE II

# **Public Health Strategies for YouthBet.net**

<b>Strategy</b> Health Promotion	<b>Intervention</b> Time Management	<b>Tools</b> Time of Your Life	Purpose Promote balanced time management in relation to gambling and other activities	Concept Contemplation <sup>  </sup> Decision balance*
	General Risk Perception	Risky Business	Explore the concept of risk and the individual perception of risk	Susceptibility* Severity* Precontemplation <sup>  </sup>
	Money Management	Lets Spend Your Money	Simulate gambling in a safe environment where youth can choose whether or not to gamble their money	Contemplation   Decision balance*   Expectations‡
	Decision-making Skills	<ol> <li>Wanna Bet scenarios</li> <li>To Change or Not to Change</li> </ol>	Highlight decisions and consequences of gambling in three main areas: relationships, money/valuables and personal feelings	Contemplation   Decision balance*   Outcome expectations‡ Normative belief† Affects‡
Primary Prevention	Odds/Randomness and Probability	Odds/Randomness and Probability	Demonstrate and teach the principles of odds/randomness and probability	Precontemplation <sup>  </sup> Consciousness raising <sup>  </sup> Capability‡
Secondary Prevention	Self-assessment (SOGS-RA)	Are You At Risk?	Provide youth with the opportunity to assess their level of gambling and their risk of developing gambling problems	Contemplation <sup>  </sup> Preparation <sup>  </sup> Action <sup>  </sup> Susceptibility* Self determination§
Harm Reduction	Minimizing Negative Consequences	<ul> <li>If you gamble, do it safely and in low-risk settings</li> <li>Signs of Problem Gambling</li> <li>Winning Ways to Keep Gambling Safe</li> <li>Characteristics of Low-risk Gambling</li> </ul>	Provide tips and information for people concerned about their own gambling or someone else's gambling	Action   Capability‡ Self-efficacy‡ Perceived control† Self determination§
	Linkages to Treatment Resources (Referral)	Ontario Problem Gambling Helpline & Kid's Help Phone	Provide resources that youth can contact if they are concerned about their gambling or someone else's	Action   Capability‡ Self-efficacy‡ Perceived control† Self determination§

- Health Belief Model (Strecher and Rosenstock, 1997)
- Theory of Reasoned Action/Planned Behavior (Fishbein and Ajzen, 1975; Ajzen, 1991)
- Social Learning/Social Cognitive Theory (Bandura, 1997; Baranowski, Perry and Parcel, 1997)
- Self Determination Theory (Ryan and Deci, 2000) Transtheoretical Model (Prochaska, DiClemente and Norcross; 1992)

sequences (Table III). In addition, there is an ethical commitment to ensure that resources are available for those youth who have identified a problem. A telephone in each location provides phone numbers for two organizations that youth can contact (Kids Help Phone and the Ontario Gambling Helpline) if they have concerns about their own gambling or someone else's gambling behaviour. A range of information on gambling, including the gambling industry, and statistics has been embedded throughout the site. This is intended to help youth have a better understanding of the gambling phenomena and related issues.

The evaluation of YouthBet.Net includes usability testing every 12 months. The aim is to investigate what youth think of the site's design, layout, navigation, graphical interface, and the interactive way content is presented in games and quizzes. This paper presents results from the first three phases. Usability studies do not examine how the site may affect or change gambling attitudes or behaviour.

#### **Participants**

A general rule in usability testing is that 5 participants will unearth 80% of issues. 20,21 Recent literature suggests that more than 5 participants are needed. 22,23 Accordingly, our study recruited 34 youth in three phases:

- Phase I (2003): 8 youth (5 male, 3 female) aged 17-22 years
- Phase II (2004): 13 (8 male, 5 female) aged 13-19 years
- Phase III (2005): 13 youth (6 male, 7 female) aged 13-19 years.

The 2003 youth were recruited through 2 youth organizations in downtown Toronto who were community partners of the YouthBet project. In 2004 and 2005, a recruitment company in Toronto recruited participants, targeting those aged 13-22 years; approximately even numbers of males and females; various ethnic and cultural backgrounds; living in diverse socioeconomic neighbourhoods in Toronto. Participants were compensated \$20-\$30, depending on age, and refreshments were provided. Youth were required to sign a consent form and in Phase Two and Three, parents of youth under the age of 18 years were also required to sign a consent form. In Phase One, parental consent was not required as the youth organization had parental consent for the youth to participate in organization activities. An ethics protocol was approved by the Human Subjects Ethics Review Committee, University of Toronto.

# Video capture of user site interaction

Video Capture of User Site Interaction methodology is based on a technique used by Eysenbeck and Kohler<sup>24</sup> and Hansen et al.25 It is accomplished via a small electronic device connected between the computer's video card and monitor, and provides a video signal recorded onto a standard

#### **TABLE III**

## Public Health Interventions "Tool Kit" on YouthBet.net

#### **Public Health Intervention**

Time Management - "Time of Your Life" (Located in the Store)

Money Management -"Let's Spend Your Money" (Located in the Casino)

General Risk Perception - "Risky Behaviour" (Located in the Back Alley)

Decision-making Skills - "Wanna Bet?" (Located in the Store and School Yard)

(Located in the Casino)

Self-assessment - "Are you at Risk?" (Located in the Back Alley)

"To Change or Not to Change" (Located in the School)

Minimizing Negative Consequences (Located in the Community Centre and Library)

Help Resources (Located in every area of the site)

Promotes balanced time management in relation to gambling and other activities. Youth are asked to assess how they spend their time throughout a day and allocate time spent on each of their daily activities. A personalized pie chart is developed and feedback allows them to adjust their schedules and identify areas for improvement. Youth are provided with sample time management strategies for each of the identified problem areas and are given the opportunity to develop additional personalized strategies.

Simulates gambling in a safe environment where youth are provided with a set amount of money to spend. The objective is to make responsible choices when spending money, whether playing the slots or shopping for necessities or discretionary items.

Explores the concept of risk in general and risk perception as viewed individually by each young person. Gambling is a sub-set of managing a variety of risks in this age cohort. Youth are asked to rank a variety of scenarios according to their perceived risk. A synopsis compares their individual responses to the responses of other youth.

Decision-making skill interventions highlight the decisions and consequences of gambling in three main areas: relationships, money and/or valuables, and personal feelings. Youth are provided with a gambling scenario and are asked whether or not they would like to bet. A random result is provided with outcomes related to the above areas. In "To Bet or Not to Bet", youth, through a decision balance exercise, are asked to assess the personal importance of particular "reasons to bet" and "reasons not to bet" and are provided with an outcome table highlighting their answers. These responses are categorized in the above-mentioned areas of relationships, money and/or valuables, and personal

Numeracy - "Odds, Randomness and Probability" A tutorial that demonstrates and teaches these three principles in a manner that highlights practical, relevant examples for youth. Youth are guided through these important mathematical concepts that form the basis of most gambling games as well as having a broad applicability for other life areas.

> Consists of the South Oaks Gambling Screen-Revised Adolescent (SOGS-RA) (Winters, Stinchfield & Fulkerson, 1993). Youth begin by rating their perceived gambling behaviour along a gambling continuum. The SOGS-RA is completed by the youth and the actual result is plotted along the continuum. The youth are able to compare their perceived gambling behaviour with the SOGS-RA rated gambling behaviour. For those individuals who have concerns about their gambling behaviour, linkages to help resources are provided.

Behaviour change interventions targeted toward at-risk or problem gambling, modelled after TeenNet's youth smoking cessation intervention (Smoking Zine located on www.cyberisle.org). Linked with a screening tool (e.g., SOGS-RA) to identify at-risk or problem gambling, developed around motivating readiness for change, decision balance, goal setting and personal action plans.

Several guides for minimizing the negative consequences of gambling have been highlighted on the site. These include tips and information for people concerned about their own or someone else's gambling, ideas for gambling safely and in low-risk settings, setting personal limit guidelines on time and money, and characteristics of low-risk gambling.

Telephones are located in every area of the site that link to two organizations (Kids Help Phone and the Ontario Problem Gambling Helpline) that youth can contact if they have concerns for either themselves or someone they know.

videocassette. A microphone and video/audio mixer allows participants' voices to be recorded on the videotape as they surf the site. A 'think aloud protocol' was used where participants were asked to narrate what they were thinking and doing while they surfed YouthBet.net. Participants were asked to work through 12 questions and scenarios related to all major sections of the site.

Participants were interviewed one-onone for 15-20 minutes post surfing to ascertain what they thought of site design, navigation, engagement and appeal, relevancy, and satisfaction with the website. They were required to complete a demographic and Internet usage survey before they started, and a short satisfaction survey after. Video and audio data of the users' site surfing experience were analyzed as one data set. Interviews were analyzed separately using a simple thematic analysis process. Preliminary results from all sources were combined according to major themes using an inductive qualitative approach.

## **OUTCOMES**

A synopsis of main findings is given in Table IV. Over the 3 phases of the process evaluation of YouthBet.net, all 34 youth recruited for the usability testing completed the required tasks. Participants had no difficulties navigating the site, finding content and playing games. Youth indicated that they liked the interactive way gambling information was presented via realistic games and quizzes: "I think [the quizzes and games]... gave me a little more information other than just reading some of the facts... This was a little more realistic". They had no difficulties with the navigation systems, both menu-based and graphical, and felt the design, layout and content were appropriate and appealing. Participants said it was not the type of site they would surf for fun, but indicated they would recommend it to a friend and would return to YouthBet.net if they needed information, had a problem, or knew someone with a gambling problem: "Well, if I knew people were having problems with gambling, then sure I would recommend this site, because it gives a lot of information about gambling ...Like the games, showed me a lot".

Participants felt like they learned something about gambling on the website. They said that there was a lot of information on the site, that the games were a fun way of learning, and that they learned where to go

#### TABLE IV

## **Key Findings From Usability Analyses**

- Liked the interactive way gambling information was presented via realistic games and quizzes "I think [the quizzes and games]... gave me a little more information other than just reading some of the facts...This was a little more realistic."

  Felt the site would be fun and educational if used by teachers in a classroom
- "I think it is a very good tool. It would be fun for the teacher too and also for the kids." Said they would return to YouthBet.net and that they would recommend it to a friend
- "Well, if I knew people were having problems with gambling, then sure I would recommend this site, because it gives a lot of information about gambling ... Like the games, showed me a lot."

- Felt registration for the games and quizzes was not a deterrent for playing and the video data
- showed that the majority of participants had no difficulties registering.

  Understood the purpose of the Slots game and said that the game made them feel bad when they were losing lots of money.
- Liked the interactivity, the graphics and colours of the quizzes. However, all of the participants liked Risky Business over Are You At Risk? (based on SOGS-RA). This finding identified an area that the designers will be working on in the future
  "Risky Business was way better. The graphics showed you each scenario...The other one [Are

You At Risk] was more plain... So, it wasn't really appealing.

• Indicated that they learned something about gambling from the YouthBet website; that the site contained a lot of useful information; that the games were a fun way of learning; and that they now know where to go for help if they need it "It made it very easy to see what types of gambling problems there are, where you could go for help, what risks or signs to look for.

Commented that YouthBet.net had either made them realize they gambled too much, or had helped to increase their awareness around what gambling is.

for help if they needed it. "I definitely learned a thing or two. I never really thought of all that as gambling. Like even just making a little bet with something. I thought there was a lot of information that would be useful."; "It made it very easy to see what types of gambling problems there are, where you could go for help, what risks or signs to look for. It did help if someone wanted that information."

When asked whether they thought the YouthBet website will have an influence on their gambling behaviour, many commented that it had either made them realize they gambled too much, or helped to increase their awareness around what gambling is: "It's made me more aware of what gambling is. That betting someone to do something is considered gambling I guess."

Phase Three concentrated on the quizzes and games. Overwhelmingly, the youth liked the interactivity of the site, including the graphics and colours of the quizzes. However, the participants liked Risky Business over Are You At Risk? (based on SOGS-RA). This finding identified an area that the designers will be working on in the future: "The other one [Are You At Risk] was more plain... So, it wasn't really appealing."

Participants indicated that: they learned something about gambling from the YouthBet website; the site contained a lot of useful information; the games were a fun way of learning; and they now know where to go for help if they need it. "It made it very easy to see what types of gambling problems there are, where you could go for help, what risks or signs to look for."

One of the main aims of the usability testing is to identify navigation, design, layout, technical and functionality issues. The two main findings were that registration for the games and quizzes was not a deterrent for playing, and the majority of participants had no difficulties registering - an improvement over previous phases wherein some youth had difficulty registering. Video data showed that the participants had no problem playing the Slots game and they understood the purpose of the game. Several commented that the game made them feel bad when they were losing lots of money. Participants liked the quizzes but had suggestions for improvement: a) reducing the number of questions in 'Are You At Risk?'; b) indicating how many questions are in each quiz so that the users know before they start; c) simplifying the result tables; d) repositioning 'next' buttons; and e) rewording results pages so that participants can easily distinguish between their actual results and the professional opinion based on their results.

## **DISCUSSION**

YouthBet.net represents one of the first comprehensive websites designed for youth gambling. Its uniqueness lies in its public health approach that addresses the continuum of youth gambling behaviour integrating prevention, health promotion and harm reduction strategies. New components are under development that will address emerging youth and gambling issues, including: youth poker, sports betting and the impact of commercial gambling advertising. However, further evaluation (process and impact) of YouthBet.net is needed to establish evidenced-based guidelines for its use in public health education and problem gambling prevention. A large-scale randomized controlled trial will be conducted to evaluate YouthBet.net's impact on positively affecting gambling knowledge, attitudes and behaviour among youth in selected developmental stages and settings. Pending this further evaluation and guideline development, YouthBet.net should be used mainly for basic educational purposes.

Expansion and marketing of legalized forms of gambling are expected to continue. A worthy challenge is to reduce the prevalence of problem gambling in youth to a target of less than two percent in five years.

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# RÉSUMÉ

**Objectif :** YouthBet.net (www.youthbet.net), un site Web interactif et multimédia fondé sur une démarche de santé publique, a pour but de prévenir les problèmes de jeu chez les jeunes.

**Participants :** YouthBet.net est conçu par et pour les jeunes. Un groupe de travail de jeunes a passé plusieurs mois à concevoir le style du site pour qu'il plaise aux jeunes de 10 à 19 ans. En tout, 34 jeunes de la région du Grand Toronto ont participé aux trois premières phases de validation de la convivialité du site par la méthode de capture d'images vidéo des interactions site-utilisateurs.

Lieu: la zone urbaine de Toronto

**Intervention :** À l'aide de diverses stratégies de santé publique (promotion de la santé, réduction des méfaits, prévention des problèmes), YouthBet.net présente des jeux, de l'information et des ressources de dépannage pour prévenir les méfaits des jeux de hasard et aider les jeunes à s'en prémunir.

**Résultats :** Les jeunes participants ont dit apprécier la présentation interactive de l'information sur les jeux de hasard (par le biais de jeux et de devinettes réalistes), en mentionnant souvent que YouthBet.net serait un outil amusant et éducatif pour les enseignants en milieu scolaire. Les participants n'ont eu aucun mal à parcourir le site, à y trouver des renseignements et à jouer aux jeux. De plus, tous les jeunes ont dit qu'ils reviendraient sur le site et qu'ils le recommanderaient à un ami aux prises avec un problème de jeu.

**Conclusion :** YouthBet.net est l'un des premiers sites Web « tout-en-un » conçus pour les jeunes qui s'adonnent à des jeux de hasard. Les résultats de notre étude seront utiles pour de futurs projets de promotion de la santé, de réduction des méfaits et de prévention des problèmes de jeu menés auprès des jeunes en faisant appel à la technologie Internet.

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