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Committee Secretary
Joint Select Committee on Gambling Reform
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Dear Ms Beverley

**SUBMISSION TO THE JOINT SELECT COMMITTEE ON
GAMBLING REFORM INQUIRY INTO THE PREVENTION AND
TREATMENT OF PROBLEM GAMBLING – FURTHER
SUBMISSION MATERIALS DEALING WITH NON-POKIES
GAMBLING**

INTRODUCTION

I refer to my submission of 8 March 2012 (my previous submission) and set out below further submissions materials relating to non-pokies gambling.

I would be happy to provide further materials upon request.

I request the opportunity to appear before the Committee.

COMMENTS ON TERMS OF REFERENCE

(a)(i) Use and display of responsible gambling messages.

This has already been dealt with in my previous submission.

(a)(ii) use, access and effectiveness of other information on risky or problem gambling, including campaigns

This has already been dealt with in my previous submission.

I should add though that campaigns by government and industry that purport to exaggerate the safety of gambling (such as early intervention strategies and unenforceable responsible gambling codes) could result in higher levels of problem gambling insofar as they play down the risks and give gamblers a false sense of safety.

(a)(iii) ease of access to assistance for problem gambling:

This has already been dealt with in my previous submission.

(b) Measures which can encourage risky gambling behaviour, including:

i) marketing strategies,

One or possibly more of the television advertisements advertising horse racing wagering are using hypnotic techniques and are in breach of provision 1.9.3 of the Commercial Television Industry Code of Practice which provides:

1.9 A licensee may not broadcast a program, program promotion, station identification or community service announcement which is likely, in all the circumstances, to: ...

1.9.3 be designed to induce a hypnotic state in viewers;

The use of aggressive marketing of Australian Rules Football sportsbetting is reckless when it is considered the game is promoted as a family sport watched by so many young people.

In general, the advertising of gambling, if it is to be allowed at all, should be treated as an adult-only activity and, for example, confined to, say, after 8 pm and certainly not allowed at sports events attended by children.

ii) use of inducements/incentives to gamble;

Ever since the Act of Queen Anne in 1710, legislators have had a statutory scheme which prevented the extending of credit to gamblers. Following the decision of the High Court in *Betfair Pty Limited v Western Australia* [2008] HCA 11 (27 March 2008) a number of bookmakers have set up in the Northern Territory to provide sportsbetting and wagering services targeting gamblers in the other states. Contrary to hundreds of years of government policy, Northern Territory bookmakers are allowed to extend credit to their clients. I have seen one situation where a gambler who operated on a credit card with a small limit was encouraged to take a credit facility with the bookmaker which then allowed the client to chase losses whereby he lost several hundred thousand dollars. In my view this behaviour by the bookmaker was predatory.

There is an urgent need for federal legislation to prohibit the granting of credit by bookmakers to gamblers to prevent widespread harm from Northern Territory bookmakers and also to prevent the “cascade effect” where consumer protection laws are progressively abandoned by the other states to enable their local licensed bookmakers to grant credit to gamblers so they can compete on a “level playing field” with Northern Territory bookmakers.

2) (c) early intervention strategies and training of staff;

The reality is that the staff work for the gambling supplier, not the gambler. Staff cannot serve two masters. Whatever might be said about staff training the “staff intervention system” is simply not working after almost twenty years. It follows that intervention strategies must either be mandatory in their application (for example, prohibiting the extension of credit) or they must be based on a reasonable gambling code enforceable by the gambler. Responsible gambling codes should form part of the contract between the gambling supplier and the gambler.

(d) methods currently used to treat problem gamblers and the level of knowledge and use of them, including:

(i) counselling, including issues for counsellors.

I have detailed my concerns in my previous submission.

(ii) education.

On balance, I think it is worthwhile educating to prevent problem gambling. Education does run the risk of normalization. But there is so much gambling being pushed on the young the time has probably come to educate them.

In 1996, I determined to carry out education to prevent the harmful effects of problem gambling. I approached Dame Phyllis Frost who convened a steering committee out of which came an educational organization called Know the Odds Inc. Tim Costello was patron, I was Chairman and we had assistance from members including Gabi Byrne, Gregor Howie and Pauline Sharma

Know the Odds Inc. produced an education kit called “Problem Gambling Today – You Figure It Out”. Over three hundred of the kits, first in the form of a VHS video/floppy disk and notes and later in the form of an interactive video/software/notes CD were distributed to schools and organizations.

The kit explained what gambling is, how it worked and how people could become problem gamblers. It is still the best material of its kind that I have seen though I no longer consider education based on reason and mathematics would be effective in preventing problem gambling on gaming machines for the reasons given in my previous submission.

Know the Odds Inc. has been voluntarily wound up and its educational materials have been placed in the public domain. I have forwarded a copy of the notes which accompanied the first (VHS/software/notes) version of the kit. I have also today posted a copy of the interactive CD to the Joint Select Committee. Should any organization want to develop educational materials I would be happy to provide copies of the Know the Odds Inc. materials for them to use.

One thing Know the Odds Inc. found was that the approach to gambling education fluctuated widely from school to school. Our experience was that anything which was not on the core examined curriculum was relegated to low importance and depended very much on the initiative of individual teachers. My personal view is that schools should have a subject in each year dealing with spiritual, psychological, relationship and physical health (survival skills) and that education about gambling should be included in this. I should add that Know the Odds Inc. was accepted by the full spectrum of schools through from fundamentalist Christian to state schools.¹

(iii) self-exclusion;

I have already written about the self-exclusion laws relating to gaming venues and casinos. Gaming, by definition, requires the gamester to be proximate to the game. By excluding the gamester from the gaming floor one also excludes him or her from gambling.

¹ Though I do not recall lecturing at an Islamic school.

In relation to other sports the concept of spatial self-exclusion is largely irrelevant. For example, a problem gambling sportsbetter needs to be excluded from access to bookmakers rather than access to sports. The problem is not that the person goes to the football but that when he is at the football he connects with his bookmaker on his cellular phone. Self-exclusion needs to be implemented at the “obtaining access to bookmakers” level. And this could be done by requiring any gambling supplier to electronically check a problem gambler database prior to the taking of a client and thereafter at regular intervals. (For pokies problem gamblers the gambler could put him or herself on a register that would bar or limit him or her from withdrawing moneys from designated ATMs, those, say, within 200 metres of a gaming venue or casino gaming floor.)

(e) data collection and evaluation issues;

I have already dealt with this in my previous submission.

(f) gambling policy research and evaluation;

There is a need for a federal study of the activities of the Northern Territory bookmakers and the Northern Territory regulators to examine:

- How much credit is being advanced to gamblers
- Whether the responsible gambling code is included in the contractual arrangements between the bookmakers and gamblers
- What complaints have been made to the Northern Territory regulators, what action has been taken on those complaints and what the outcomes have been.

Kind regards

Tim Falkiner

Melbourne

Attachment
To Supplementary Submission 4a

YOU FIGURE IT OUT PROBLEM GAMBLING TODAY

NOTES ACCOMPANYING VIDEO AND SOFTWARE

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The Uniting Church In Australia, Victorian Synod,
Commission for Mission

In addition to FYA and the Uniting Church, Know the Odds Inc wishes to thank:

the presenters: Jennifer Byrne and Suzanne Nguyen,

and those interviewed: the students at Box Hill, Assoc Professor Jacques Boulet of Borderlands Cooperative (<http://www.borderlands.org.au/>), Tim Falkiner, Chairman, Know the Odds Inc and Gabriela Byrne, Director of the Free Yourself Program (<http://www.freeyourself.com.au>).

Rev Tim Costello, patron of Know the Odds Inc, for his continued encouragement and support.

COPYRIGHT

Copyright in the kit of which these notes form part is vested in Know the Odds Inc. A0034211H ABN 83 594 606 861 (www.knowodds.org).

Where a school has purchased a kit, the kit (or parts of it) may be reproduced and distributed within the school community for educational purposes.

PURPOSE

The purpose of this kit is to educate students about problem gambling to:

- prevent them becoming problem gamblers
- understand problem gambling in others.

ISSUES

The issues raised by the interviewers are:

- what things do we associate with gambling?
- do young people need to be educated about problem gambling?
- is gambling a problem like drugs or alcohol?
- what is gambling?
- how is gambling different to other businesses?
- how does the gambling industry make so much money?
- why do people become problem gamblers?
- how does it affect their lives?
- why do people keep gambling if they are losing?

HOW TO USE THIS KIT

The kit is comprised of:

- 1 VHS Video titled "You Figure It Out" - 20 minutes
- These notes
- 2 Three-and-a-half inch computer diskettes containing:
 - Software - KTOvideo.exe - 72K approx - exercises designed to explain the role of probability theory in problem gambling
 - Word 97 document file - KTOactivities.doc - electronic copy of activities files contained in these notes.

Video

The kit is built around the video. There are essentially two ways to proceed.

Show whole video then discuss

The video may be shown for its full 20 minute length and these notes may be used to discuss the questions raised and covered in the video. To refer back to the video the video can be rewound to the [elapsed time] shown immediately below the question and the scene replayed.

Show video scene by scene

Or, you can ask the class each question in turn and discuss them briefly before or after playing the relevant part of the video, once again using the [elapsed time] counter.

For further assistance an Outline of the video is set out as Appendix 1.

Activities

Activities accompanying these materials may be photocopied for distribution to students or photographed onto transparencies for projection and discussion. The activities sheets are also contained in the Word 97 file titled "KTOactivities.doc" on the computer diskette which forms part of this kit.

Software

The students should run the accompanying software after the video has been viewed. Details of the software are contained in these notes.

HEALTH PROMOTION IN SCHOOLS

Education to prevent problem gambling fits into the Health Promoting School strategy.

The Health Promoting School, according to the World Health Organisation, is a "place where all members of the school community work together to provide students with integrated and positive experiences and structures which promote and protect their health".

This includes

- formal and informal curricula in health
- creation of a safe and healthy school environment
- provision of appropriate health services
- involvement of the family and wider community in efforts to promote health.

Problem gambling is a psychological disease which poses a risk to students, both at school and in later life, in two ways:

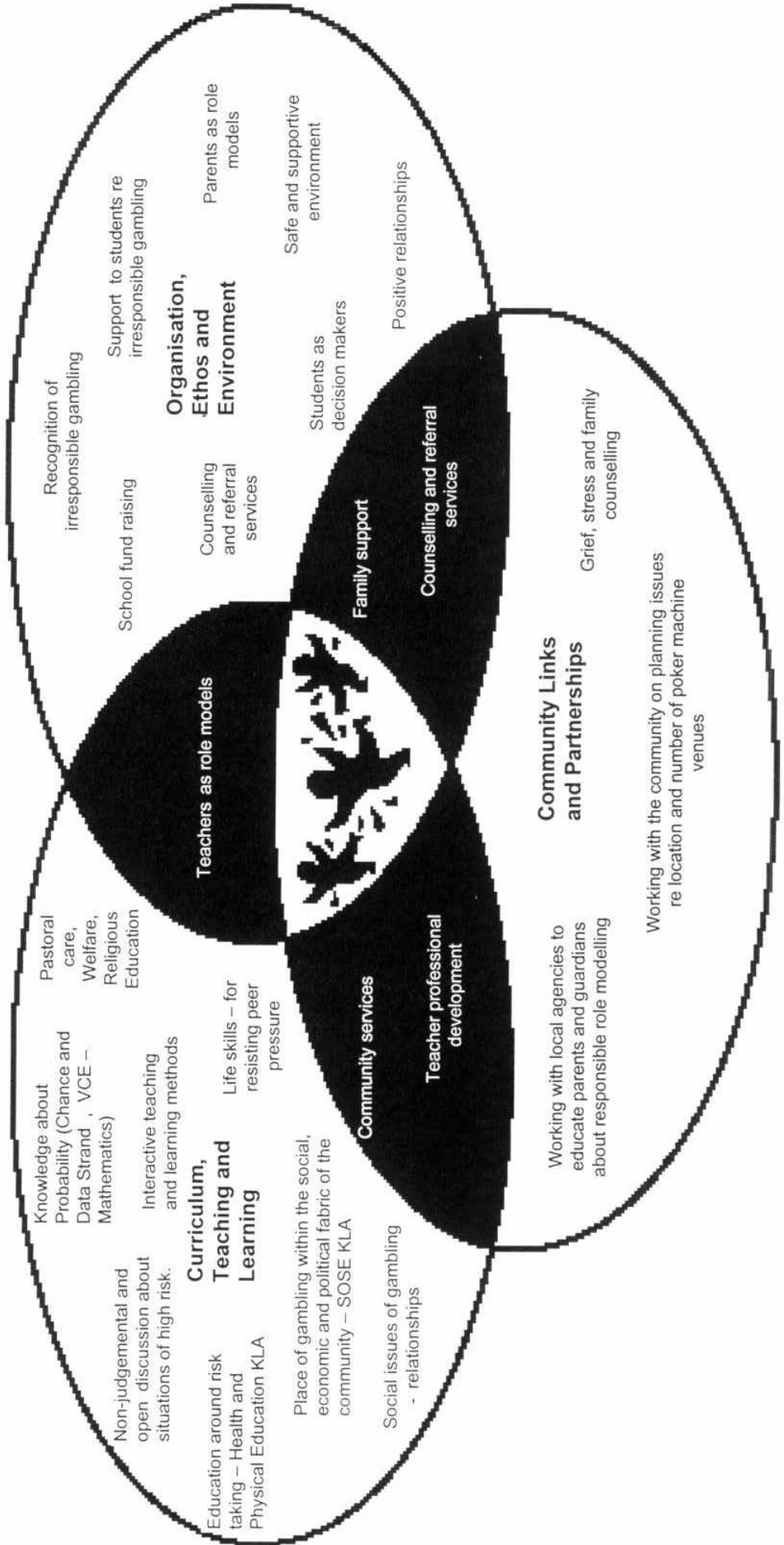
- students at risk of becoming problem gamblers
- students at risk of being adversely affected where they are in a family, personal or business relationship with a problem gambler.

In these cases the student risks psychological damage and physical damage. Protecting students against such damage *protects their health*.

The materials in this kit are designed to educate students about the underlying nature of gambling insofar as it explains the process and consequences of problem gambling. By so doing the kit seeks to protect students from becoming problem gamblers and to better enable them to cope where they are or come into a relationship with a problem gambler.

The diagram on the next page sets out a framework showing how gambling education could be addressed within the Health Promoting Schools Framework.

HEALTH PROMOTING SCHOOLS FRAMEWORK: GAMBLING EDUCATION



LIST OF QUESTIONS

The following list of questions in the video is suitable for distribution to students prior to the session.



- What things do you associate with gambling?
- Do you think young people ought to be educated about problem gambling?
- Do you guys think gambling is a problem like drugs and alcohol are?
- How would you explain just what gambling is?
- Is the gambling industry different to other businesses?
- How does the gambling industry make so much money?
- So you were a problem gambler, how did that affect your life?
- Why do you think people become problem gamblers?
- So why do you think people gamble if they are going to lose?
- What you are saying is that in sport, the more you try, the better it gets - but this is not the same with gambling?

QUESTIONS RAISED IN THE MATERIALS (Including teacher background)

(Numbers in square brackets [] indicate elapsed tape time in minutes and seconds)

What things do you associate with gambling?

[1.05] Jennifer to students



The casino and horse racing ... playing cards ... general casinos, cards, pubs - a lot of pubs have it in the country ... horse racing and dog racing ... money ... bright lights and alcohol ... and money.

Do you think young people ought to be educated about problem gambling?

[1.25] Suzanne to Jacques Boulet



Former Associate Professor Jacques Boulet says you need to know about problem gambling just as you need to know about any other risky activity.

Tim Falkiner, the Chairman of Know the Odds says you need to know for two reasons:

To stop you becoming problem gamblers; and

To enable you to better cope where you come into a personal or business relationship with a problem gambler.

Other answers that might be given are:

Adults have passed laws making all sorts of gambling legal and they have a duty to protect young people.

Adults expect young people to be responsible for their lives - but to do that young people need to be empowered, to be given knowledge to make informed decisions.

Do you guys think gambling is a problem like drugs and alcohol are?

[2.35] Jennifer to students



Comments of students: "It all depends how far you take it ... Yes, definitely, because people might lose their homes and their families over it ... It is, because when people get addicted it is the same as like being on heroin or something ...Yes, sure if you are facing something like poverty or bankruptcy, yeah, something like that ..."

If the class wishes to discuss the similarities of problem gambling to problems with alcohol, hard drugs and tobacco, you may wish to use the matrix which is set out in **Activity 1**. The matrix is designed to raise the awareness of those present about the need to include gambling as a potentially addictive activity like the use of tobacco, alcohol and hard drugs. One piece of feedback received was: "Substance and activity distinction - is it really necessary to look at the differences?" Note that some of the vertical categories are vague but the point of the matrix is to generate discussion; understanding will come out of attempts to further define the questions. Upon reaching the foot of the matrix you may wish to revisit the first row dealing with the distinction between activities and substances.

How would you explain just what gambling is?

[4.15] Suzanne to Tim Falkiner



In answer to Suzanne's question, Tim explains that gambling is the staking of money on random number generators such as roulette wheels, poker machines, race tracks and sporting competitions - things that combine randomness with a definite outcome. The following comments and exercises may be used to clarify students' comprehension of this.

What things can we gamble on?

Activities on random number generators

The exercise in **Activity 2 Part A** is designed to get students to think about the qualities needed for a random number generator which can be used for commercial gambling.

There are two qualities stated by Tim Falkiner in the video. These are:

- They all generate randomness. We get randomness by combining a lot of forces that lead to a result that cannot be known in advance.
- Random number generators, as well as embodying randomness, generate a certain, an unambiguous, outcome.

Activity 2 Part A gives four examples of events and asks which are suitable for betting on. In other words it asks which are good random number generators having the two qualities stated above.

Activity 2 Part B carries this examination of random number generators further, having the students consider how randomness is generated in the four main forms of gambling and how the outcome of the randomness is determined in a certain, an unambiguous, way.

Students are invited to consider the four following categories of gambling:

- Purchasing tickets in lotteries (lotteries)
- Playing casino games (gaming)
- Betting on races (wagering)
- Betting on sports competitions (sportsbetting)

They are then asked to consider one example of gambling in each category and describe how the randomness inherent in that form of gambling is generated. For example, the randomness in the toss of a coin comes about as a result of: the way it is held before it is flipped, the speed of rotation, wind resistance, the distance it travels and the way it bounces.

The students are then required to explain how the randomness is structured so that a certain is generated. For example, a coin can only land two ways, heads and tails. A football match is determined by which team scores the most points.

The students' answers are set out on a table in the form shown below. There is a full size copy of the table suitable for photocopying and distribution in **Activity 2 Part B**.

Category	Example	How randomness generated	How result determined
----------	---------	--------------------------	-----------------------

Lottery			
Gaming			
Wagering (on races)			
Sports betting			

Size of random number generator

The size of the random number generator is not really material. Dice will generate random numbers and so will a race track.

Biased random number generators



Not all of the random number generators used for gambling are "pure" like dice, a roulette wheel or a lottery barrel. Horse racing and sporting competitions are examples of biased random number generators. Better horses are more likely to win over inferior horses and good teams over poor teams but there is always an area of randomness.

The gambling supplier simply compensates for the bias by paying out at different odds or by requiring the winning team to win by a certain number of goals, points etc. But in each case the gambling supplier makes an estimate of the true odds and pays out at inferior odds. (Totalisators are a little different, here all the bets are pooled and the winners are paid out after deduction of a percentage.)

Skill

Some gambling offers a gambler the opportunity to improve his chances by the exercise of skill. However, the average gambler cannot realistically hope to offset the whole of the gambling supplier's advantage through the use of skill.

Gambling and risk-taking

The word "gambling" has two meanings.

In its narrow sense, the sense we are concerned with here, "gambling" refers to the recreational staking of money on events of chance such as the playing of casino games or the wagering of money on races or sporting competitions.

In its wider sense, "gambling" can be used to describe risk-taking generally, particularly where the risk-taking has an element of

recklessness or courage. Thus the reckless stock exchange speculator and the football coach who puts an untried player into a key position can both be described as gamblers, in the wider sense.

There are a range of definitions of gambling (in its narrow sense) viewed from technical and social perspectives in **Appendix 2**.

Can we gamble without money?



Gambling is not possible without money or something valuable. Students need to understand that they are not gambling simply because they play with instruments that can be used for gambling such as dice or cards. Simply playing at something that can be gambled on, such as cards or dice or cheering your team at a sporting competition, is not gambling if there is no betting associated with it.

Attending a horse race meeting or sporting match is not gambling if the person attending does not make any bets. A jockey who rides a horse in a race is not gambling; in fact, jockeys are forbidden to bet on races they ride in.

Money makes a great difference. Glasgow University carried out an experiment monitoring the heart rates of gamblers. In a simulated game of blackjack the gamblers' heart rates showed a tiny rise. The heart rate of the same subjects playing for money in a casino "shot up" by an average 25 beats per minute. One gambler's heart rate went from 72 to 130.¹

Many gambling games would hold no attraction without money. One cards expert describes Baccarat in the following terms: "To say that the actual play of Baccarat is simple is an understatement. Most children's games are infinitely more complicated, and it is doubtful if Baccarat played without stakes could hold the attention of any but the most backward child."²

Is the gambling industry any different to other businesses?

[6.12] Suzanne to Tim Falkiner

Businesses sell goods and services. The Coca Cola Corporation sells soft drink, the Hilton Hotel chain sells overnight accommodation. The gambling industry sells gambling. Gambling is the staking of

money on a random number generator. The gambling industry is a service industry offering gamblers the opportunity to stake money on random number generators.

A lottery company sells tickets to a draw from a random number generator, normally a Perspex globe where coloured balls are mixed by tumbling or being blown about in an air jet. A casino company operates a big building full of random number generators using wheels, cards, dice, tiles, coins and computers which customers can bet on. Bookmakers and totalisators offer to take bets on larger, outside, random number generators such as horse and dog races and sporting competitions. Internet gambling is simply traditional forms of gambling played over the internet; internet gambling is becoming increasingly sophisticated with technological change.



The essential difference with the gambling industry is that the service offered is not that of exchanging money for something else but of exchanging money for the chance of getting back more money. As Tim Falkiner says in the video, "In the case of buying a can of soft drink, you pay money, you get the can of soft drink - in the case of gambling, you put your money down and you either lose that money or you get more money."

How does the gambling industry make so much money?

[7.42] Suzanne to Tim Falkiner

A gambling business is like any other business in that it must make a profit. All profitable businesses must have a profit margin. Overall, the soft drink manufacturer must sell its cans of soft drink at a price higher than the cost of production and the hotel chain must hire out its rooms at more than its operating cost per room.

The gambling industry in almost all cases makes its profit by having the gambler gamble against the establishment at inferior odds. As we have seen, gambling is about money and the only way a gambling supplier is going to stay in business is if it takes in more money than it pays out.



To take an example, in the case of an even money red bet on a roulette wheel the true odds are 18:19 because there are 18 red pockets as against 19 black and green. On average, for every 18 bets the gambler wins the house will win 19. Thus, on average, it can expect to win one extra bet every 37 spins ($18 + 19 = 37$).

Over a sizeable number of bets, the law of averages will take effect and ensure the gambling supplier will win more money than the gambler. This is illustrated in the random walk program in the accompanying software. The students' appreciation of the program may be tested using the random walk [Activity page](#) in the section on software.

Note that these materials are designed to explain what happens to problem gamblers, not to teach how to gamble. For a full treatment of the workings of gambling refer to comprehensive texts such as John Scarne "Scarne's New Complete Guide to Gambling" Simon & Schuster 1986.

So you were a problem gambler - how did that affect your life?

[11.16] Suzanne to Gabriela Byrne



Gabriela explains that problem gambling caused her family financial distress. More importantly, it changed her personality and her family really did not know what to do with her.

She suffered mood swings and her erratic behaviour was most confusing and distressing to her children. Gabriela believed that her change of personality was more serious than the money problems.

Further explanation

Problem gambling is not a new phenomenon. An early Indian poem³ from 1500 BC describes the problem gambler's loss of control and distress - referring to dice in the following terms.

*“Downward they roll, and then spring quickly upward
and, handless, force
The man with hands to serve them.
Cast on the board, like lumps of magic charcoal, though
themselves cold, they burn
The heart to ashes.”*

Essentially, problem gambling causes two types of damage:

- emotional damage, and
- financial damage.

Emotional damage takes two forms, damage to relationships and damage to self-esteem. Usually, emotional damage will tend to be

greater in personal relationships and financial damage will tend to be greater in business relationships.

Why do you think people become problem gamblers?

[12.45] Suzanne to Gabriela Byrne

Gabriela explains that people who become problem gamblers have problems. However, the problems which cause problem gambling can be very common problems of the sort that most of the population have.



She did not realize that gaming rooms were set up in a way that distracted the gambler's senses - sight, hearing, feeling, taste and smell and this distraction gives the illusion that your problems do not exist. And so you think you have found a solution for your problems but they all come back when you leave and, in fact, you have more problems.

She explains how the problem gambler becomes hooked on the high caused by the release in the brain of arousal chemicals.



One way in which these arousal chemicals are released is by the effect of flashing lights, lights flashing at the tempo of an aroused heart beat. Seeing these lights makes your heart beat faster and this releases arousal chemicals which put you in a state of excitement. Also, like a drug addict, the problem gambler experiences increased tolerance and one-line-one-bet gambling ceases to give you the kick and you have to play more credits.

Eventually the problem gambler takes money from inappropriate or illegal sources and even the taking of that risk gives the problem gambler a kick. The problem gambler becomes hooked on the excitement of risk-taking and wants to indulge in risk-taking activity over and over again.

Further explanation

(Associate Professor Howard Shaffer, Director of Addictions at Harvard Medical School sums it up thus: "*Gambling affects the central nervous system like other drugs, other powerful experiences. Now, by the way, everything influences the central nervous system. So let's not miss that point. Gambling is not dramatically different from all human experience except that it's more potent, more reliable*"⁴)

So, why do you think people gamble if they are going to lose?

[15.35] Suzanne to Tim Falkiner



Tim replies that in the short-term gamblers can win or lose but if they continue to bet against the odds for long enough they will lose. He gives an analogy with sport and describes how the feelings of anticipation, thrill and outcome - joy or disappointment - are similar in both in sport and gambling and how the ability to keep going in the face of disappointment works in gambling as it does in sport.

Further explanation

Rev Gordon Moody who helped establish Gamblers Anonymous in the UK used the analogy of a ferris wheel to describe action gambling, capturing the idea of the circular, repetitive motion of staking, event and outcome.

"Action gambling has a circular motion like a ferris wheel. It moves rapidly from staking to suspense (when the wheel or the card turns). From the showdown to the payment of winnings, to staking again, round and round without pause. The peak and point of the experience is not the winning but the arousal and excitement that is enjoyed as the moments of suspense follow one another rapidly. Problem gamblers are caught on that wheel in a way that others are not, and until either all their money is gone or the action ceases they cannot stop."⁵

Moody points out that the problem gambler also gets on a merry-go-round of risk-taking in order to beg, borrow and steal money to gamble with and to keep his family pacified. This risk-taking augments the thrill of gambling. (This point is made by Gabriela Byrne in her interview.)

What you are saying is that in sport, the more you try, the better it gets - but this is not the same with gambling?

[17.20] Suzanne to Tim Falkiner



Tim explains that there is a process by which problem gambling happens, how the gambler finds the activity enjoyable at the start but that over time, as losses mount, the gambler keeps gambling in the hope of getting a big run of wins to recover all the money. As the law of averages takes hold, that does not happen. This can be seen from the computer simulations.

Further explanation

Problem gamblers do not just happen overnight. Problem gambling has a progressive development.⁶ Problem gamblers can be seen as going through three phases: the winning phase, the losing phase and the desperation phase.⁷

Gamblers describe the first phase, the winning phase, as exhilarating. Some compare their early gambling to having a wonderful love affair, others as a magical experience.⁸

In this phase, gambling is seen as innocent and enjoyable. The gambler may be winning in the short term or losses are small and outweighed by the novelty and excitement of this new activity.

Just how a gambler moves from the winning phase to the next phase, the losing phase, is disputed. Some experts hold that a big win is the major trigger. It is argued that the major win causes the gambler to become over-optimistic and to increase the size and frequency of his bets.⁹ At least one other expert sees the big loss as the catalyst for problem gambling, arguing that this puts the gambler "on tilt" and "chasing" losses.¹⁰ Or, both theories could be correct and the transition could occur either way. As Charles Cotton wrote in "The Compleat Gamester" over 300 years ago: *"Restless I call him [the gambler], because (such is the itch of play) either winning or losing he can never rest satisfied, if he wins he thinks to win more, if he loses he hopes to recover."*¹¹

It is certainly beyond dispute that when problem gamblers enter the losing phase they "chase" losses.¹² This involves continuing to bet in order to win so as to recoup earlier losses. Problem gamblers can continue to gamble in the face of the most distressing anxiety.

This is because they learn to associate the distress of losing with the anticipation of the subsequent powerful reward of winning.¹³ As one writer explains:

"A partial and random reinforcement schedule ... is the most powerful behavioural conditioner. A typical casino-gambling game is just that - a partial - and random-reinforcement game where rewards occur with irregular frequency."¹⁴

Put simply, when they are losing, gamblers keep going, lured ever onwards by the expectation that their luck has to change. Not only that, the losing gambler has dedicated himself to the task of winning the lost money back; as Moody explains:

"He is absolutely committed now. Like Macbeth he is in so far that to go back would be as far as to go right over - indeed further. To get right over he needs only that final debt-clearing, fortune-making win or succession of wins. To go back, he would have to settle all those debts one by one ... In any case there is his family. They despise him; some of them hate him. He must convince them by that big win that he was right all the time."¹⁵

The third and final stage in the descent into problem gambling is the desperation stage. What distinguishes this phase from the losing phase is that there is a frenzied acceleration in the rate of gambling.

DEBATE (ESSAYS)

The following topics are useful for generating discussion about problem gambling:

Topic 1 - Who causes the greater harm, the drug addict or the gambler?

Topic 2 - Society has the responsibility to protect individuals from problem gambling

Other topics may be found on the Know the Odds Inc website at <http://www.knowodds.org>.

ACTIVITIES

ACTIVITY No. 1

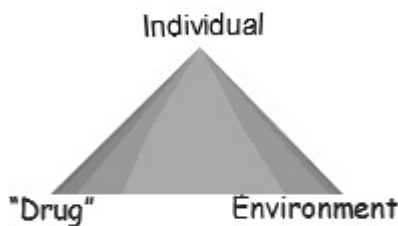
Table for comparing alcohol, hard drugs, gambling and tobacco

	Alcohol	Hard Drugs	Tobacco	Gambling	
Substance or activity?					substance, activity or both
Addictive? Is the substance or activity potentially addictive?					no moderate strongly
Legal? Is it legal for adults?					yes or no
Social attitude? What is society's attitude generally					indifferent encouraged accepted not accepted
Social concern?					none some much
Government (state) attitude?					encouraged accepted not accepted
Advertising restrictions?					none some prohibited
How destructive to the individual and family?					not at all mildly moderately very
Prevalence? What percentage of adult population directly affected					1% - 10%
Increasing or decreasing problem for society?					increasing steady decreasing

Some notes on Activity 1

The purpose of this exercise is to promote discussion and thought, not to provide firm answers.

Substance or activity? The issue raised here is - are we talking about substances or activities? Do we have a drug problem or do we have a problem with people taking drugs? Do we have an alcohol problem or do we have a problem with people drinking too much alcohol? In discussing this issue you may wish to consider the observation of Durand Jacobs, one of the senior gambling addictions experts in the USA. Jacobs observed that addictive behaviour was like fire in that one had to have: a psychologically vulnerable person (fuel), access to the potentially addictive substance or behaviour (oxygen) and an introduction (spark). This may lead into a discussion as to the extent to which government has the duty or right to prohibit the community's access to dangerous substances or activities. Another model for considering addictive



substance/behaviour is this diagram.

In this model the risk is brought about by the interaction between the individual and the "drug" coupled with the environment e.g. absence of adults, peer group pressure etc.

Addictive? This raises the question of what is addiction. It also draws attention to the fact that there are different "strengths" of alcohol, drugs, tobacco and gambling.

Legal for adults? This is more straightforward. Alcohol is legal, hard drugs are illegal, tobacco is legal and gambling is legal.

Social attitude? Although some things may be legal, what is society's attitude? Obviously, hard drugs are frowned on by the vast majority.

Social concern? To what extent does society's attitude toward potentially addictive things accord with its level of concern over the damage being caused? Is society hypocritical? Does society accept something whilst at the same time admitting that it causes harm?

Government (state) attitude? What is the local state government's attitude to each of these things?

Advertising restrictions? How heavily is the substance/activity regulated in terms of advertising?

How destructive to the individual/family? Just how serious does the class consider the damage caused by the activity to the individual? What weighting does the class give to different sorts of damage such as physical damage (e.g. lung cancer), unintentional death (e.g. overdose, cancer), suicide, financial loss, crime, lost opportunities, loss of reputation, loss of relationships, stress. What weighting is given to damage to family as opposed to suffering by the individual.

Prevalence? How common is the problem? What percentage of the adult population does it directly affect (i.e. how many problem drinkers, drug users, smokers, problem gamblers). This of course promotes discussion on where the threshold lies before a person has a problem with the substance/activity.

This may start the students thinking about the how the seriousness of a class of addiction from society's viewpoint might be measured by combining:

- the degree of destruction to the individual/family with
- the prevalence, i.e. the percentage of the community exhibiting the addictive behaviour: drug taking, problem gambling etc.

The most authoritative prevalence percentage figure for Australian problem gamblers is 2.1% given by the National Gambling Enquiry conducted by the Federal Productivity Commission.

Increasing or decreasing problem? Are the problems going away or getting bigger?

ACTIVITY No. 2 - PART A

Which events would lend themselves to betting?

Event	Suitable - yes or no?	Why?
The sun rising in the morning		
The shape of a cloud		
The fall of a pair of thrown dice		
The result of a football match between the team at the bottom of the ladder and the team at the top of the ladder		

Note for teachers

If this exercise is done in class, the class could be split into four groups with each group completing one category and reporting its answer to the class followed by discussion.

Suggested answers to Activity 2 - Part A

As pointed out in the definition "commercial gambling is the staking of money on a random number generator", only certain types of events are suitable for gambling. These events require two things:

- (1) an element of randomness; and
- (2) an outcome which is readily quantifiable.

the sun rising in the morning - obviously this is unsuitable to gamble on as it is too certain; it does not embody any real degree of randomness.

the shape of a cloud - obviously this is unsuitable as the shape of a cloud would be difficult to establish with any certainty.

the fall of a pair of thrown dice - this can be the subject of betting because there is a satisfactory element of randomness in the tumbling and bouncing of a pair of dice and the result is clear.

whether the football team at the bottom of the ladder will beat the football team at the top of the ladder in the forthcoming match - this can be the subject of betting. There is a large element of randomness including the weather, the state of the ground, whether the match is home or away, the composition of the teams, the physical and mental condition of each player, the interaction of the players on the two teams and the bounce of the ball. Also, the result measured in goals is clear-cut. It is true that there is a bias; the top team will be very likely to beat the bottom team but this can be compensated for in two ways. First, one can have an even-money bet based on a winning margin; for example, the top team will beat the bottom team by five goals. Secondly, one can compensate by having odds that reflect the true chances: for example, a gambler gets paid three times as much if the bottom team wins as if the top team wins.

ACTIVITY No. 2 - PART B

Considering Different Gambling Types

1. Name one type of activity falling under each of these categories - e.g.: one type of casino gaming is playing roulette, one type of sportsbetting is betting on cricket matches.
2. For each category, name one example of that activity and describe in respect of that activity how the randomness inherent in that activity is generated. (Randomness is caused by an interplay of natural forces which gives rise to a result that cannot be predicted in advance.) For example, the randomness in the toss of a coin comes about as a result of the way it is held before it is flipped, the speed of rotation, wind resistance, the distance it travels and the way it bounces.
3. Describe in respect of each activity how a result which is certain is reached. For example, a coin can only land two ways, heads and tails. A football match is determined by which team scores the most points.

Category	Example	How randomness generated	How result determined
Lottery			
Gaming (casino games)			
Wagering (on races)			
Sports betting			

Note for teachers

If this exercise is done in class, the class could be split into four groups with each group completing one category and reporting its answer to the class followed by discussion.

Some suggested answers to Activity 2 - Part B

Lotteries formerly employed the drawing of tickets or marbles out of a barrel which was rotated to mix them up. These days lotteries tend to take the form of lottos where the result is determined by drawing a combination of balls out of a machine which creates randomness by either tumbling them in a washing-machine type action or blowing them about in an air-jet.

Gaming. A casino is a building full of random number generators; some are electronic, some mechanical and some manual. These include: poker machines (electronic random number generator), Blackjack and Baccarat (shuffling of cards, play of cards during the game), Roulette (spin of wheel, spin of ball, friction, angle of deflection from studs), Craps and Sic Bo (dice), Pai Gow (shuffling of tiles), Two-Up (spin of coins), Lucky Wheel (spin of the wheel).

Wagering. In horse racing, classing, handicapping, barrier draw, jockey, form, weather, state of track, length of track and the interaction of the horses throughout the race are just some of the variables that combine to create randomness of outcome in what the author Frank Hardy called "the four-legged lottery". Finally, there is the fixing of odds on each horse. The result of a horse race is determined by the order in which the horses run past a finishing line and the horses carry numbers which are displayed showing first, second and third. A camera is located on the finish line and close finishes are determined by photograph giving rise to the term: "photo finish".

Sportsbetting. Examples here might include soccer, football and cricket. Elements of randomness might vary a little between different sports but include such things as home advantage, weather, state of the ground, injuries, choice of team, physical and mental condition of the players, coach's strategy, choice of umpire, interaction between the players on the field, and "the bounce of the ball". Note that there is a scoring mechanism (e.g. goals, strokes, runs) which ensures that the result is clear. In all sporting competitions there is some scoring mechanism designed to give a

clear result, for example: soccer - goals, Australian rules football - goals/points and cricket - runs.

SOFTWARE

What the software does

The accompanying software is designed to teach students the basic concept of the law of averages by having them seeing it in action. A failure to understand the law of averages renders a student at greater risk of becoming a problem gambler. The software is specifically designed to demonstrate how the law of averages works for those who have no aptitude for mathematics.

Opening screen

When run, a window appears in the centre of the computer screen offering four sub-programs to run. Click on each button to run each sub-program. Each sub-program contains text explaining what is happening.

Random walks screen

The first program is titled: "Random Walks" and shows in a simple graphic form what happens when a coin is tossed, a roulette wheel run or a poker machine played for a large number of times. The students' appreciation of this program can be tested using the Random Walks Activity two pages below.

In the first three parts of the exercise the student is standing on a line 10,000 steps long.



First, the student tosses a coin. Each time it comes up heads, the student steps forward (up the screen) and to the left. Each time it comes up tails, the student steps forward and to the right. The student presses the button marked "Toss a coin - 10K" a few times and sees what paths he or she might be likely to take.

Secondly, instead of tossing a coin, the student is holding a roulette wheel and spinning it before taking each step. The wheel has 18 red pockets, 18 black pockets and one green pocket. If the ball lands in a red pocket the student "wins" and steps forward and left. If it lands in a black pocket or the green pocket the student "loses" and steps forward and right. The student presses the button marked "One zero roulette" a few times to see what paths he or she might be likely to take.

Thirdly, the student does the same exercise with the roulette wheel but instead of one green pocket the wheel has two green pockets

(as they do in the USA). This time there is an extra green pocket which will result in a step forward and right. The student presses the button marked "Two zero roulette" a few times to see what paths he or she might be likely to take.

The screen is now cleared by pressing the "Clear" button.

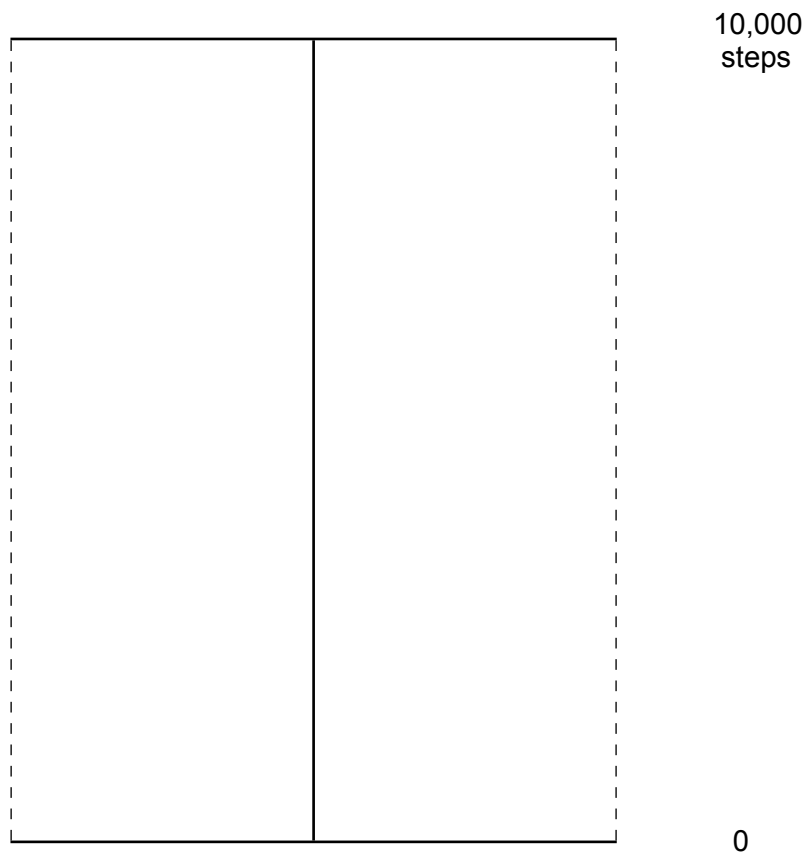
Fourthly, the student has, instead of a roulette wheel, a gaming machine which pays 90%, no jackpots, prizes from 2 - 1,000 coins and the line is 100,000 steps long. Each time the student puts in a coin he or she steps forward and right except where the machine pays out where the student steps forward and to the left, once to the left for each coin paid (less one for the coin put in, which the machine keeps).

Random Walks Activity

Imagine you are standing on a line 10,000 steps long.

1. You are tossing a coin. Each time it comes up heads you step forward (up) to the left and each time it comes up tails you step forward (up) and to the right.
2. You are operating a roulette wheel with 18 red pockets, 18 black and one green pocket. Each time the ball lands in a red pocket you step forward (up) and to the left. Each time the ball lands in a black or green pocket you step forward and to the right.
3. As in 2 above but the roulette wheel has two green pockets instead of one.

On the diagram below, draw five examples of the tracks you might leave if you carried out the task in 1 above. Using different colours, do the same for tasks 2 and 3.



Note

The lines wiggle. Gamblers have good days and bad days. Sometimes they make money and sometimes they pay out money.

Whether the odds are 1:1 as in coin tossing or biased in the case of the roulette wheels and poker machine simulations, some "walkers" walk on the left-hand side of the line - equivalent to being ahead. However, where the odds are biased in favour of the gambling supplier, over time, the walker is less and less likely to be on the left-hand side of the line.

Coin toss screen

The second program is titled: "Coin toss". When the "Toss the coin" key is pressed the computer simulates tossing a coin ten thousand times and writes down the result at 10, 100, 500, 1000, 5000 and 10,000 tosses. The key should be pressed a number of times and students should note the tendency for the percentage variation to diminish the more times the coin is tossed.

Rain on Table screen

The third program is titled: "Rain on Table". In this exercise the student is looking down on a yellow table divided in half (i.e. into two equal parts) by a light-green line. When the key marked "Rain - 10,000 drops" is pressed it starts raining and 10,000 dark-blue raindrops land on the table randomly. The numbers of raindrops falling on each side of the green line, the equally divided table are similar to those obtained by tossing a coin 10,000 times or spinning a red/black roulette wheel (with no green pocket) for 10,000 spins.

How many raindrops will fall on each side? Click on the "Divide in half" button and a line divides the table in equal halves and shows, in light green figures, how many drops fall on each side of the table.

Now what happens if a line is drawn dividing the table into two unequal parts having areas in the ratio of 18:19 (like a roulette wheel). To find out, click the "Divide in ratio 18:19" button and a purple line is dividing the table in the ratio 18:19 is drawn to the left of the green equal dividing line. The purple figures below each part show how many of the raindrops fall on each side of the purple line.

Note

The drops falling between the two lines are counted on the right hand side. This is a useful way of picturing the house advantage.

Pokies Graph

This represents 20 players playing poker machines. Each coloured line tracks a poker machine player playing 100,000 lines on a 90% player return machine.

Poker machines use combinations of wheels to generate a large variety of combinations. Four wheels of ten stops provide $10 \times 10 \times 10 \times 10 = 10,000$ possible results.

Imagine a big wheel with 10,000 stops and the following prizes distributed around it:

500	prizes of	2 coins	=	1000 coins
200	prizes of	5 coins	=	1000 coins
100	prizes of	10 coins	=	1000 coins
50	prizes of	20 coins	=	1000 coins
20	prizes of	50 coins	=	1000 coins
10	prizes of	100 coins	=	1000 coins
5	prizes of	200 coins	=	1000 coins
2	prizes of	500 coins	=	1000 coins
1	prizes of	1000 coins	=	1000 coins
Total prizes				9,000 coins

The prizes total 9,000 coins. If the wheel stopped at each stop in turn - 1, 2, 3 etc. after putting in 10,000 coins, the player would get 9,000 coins in prizes. This is known as a 90% player return machine and the "hold" or "house percentage" is 10%, i.e. 100% minus the 90% returned to the player.

Of course, the wheel is random and the prizes are paid out in a random manner. Machines may be linked together to provide a large lottery-type prize called a linked jackpot.

Technical

The program is written in Microsoft Visual Basic Version 6 and is titled "KTOvideo.exe". The program is a compiled, stand-alone program requiring only the Windows 95 or above operating system. The program simply generates screens; it does not write to disk or printer.

To run the program from diskette, insert the diskette, open the diskette (usually drive A) using "My Computer" and double-click on file KTOvideo.exe. This will load the program and bring up the opening screen.

Some users with earlier 32-bit windows operating systems software who have not installed a recent VisualBasic program on their systems may lack the necessary system resources for running KTOvideo.exe and need to install them.

Accordingly the two diskettes contain, in addition to KTOvideo.exe - (disk 1), additional files to enable KTOvideo.exe to be installed so as to insert and update the necessary system resources.

It is recommended that you try and run KTOvideo.exe as a stand-alone program with your existing system.

However, if this generates errors such as that the file "msvbvm60.dll" is missing or that a .dll file is out of date it will be necessary to install the program using the add/remove programs feature of Windows 95/98.

Ensure all other programs are unloaded. Insert disk 1 into drive A:, click on "start" and go to settings - control panel - add/remove programs. Click on the "Install" button, then the "Next" button and this will bring up a screen asking if you want to run "A:setup.exe". Click the "Finish" button and this will take you through a program which will ask you to insert the disks (it will ask for disk 1 followed by disk 2 but insert disk 2 and then disk 1 - any file the program asks for will be on one disk or the other) and the program will install and update the necessary system files - prompting where necessary. You will then be able to run KTOvideo.exe either from the diskette or from your computer's hard disk.

The program may be uninstalled using the settings - control panel - add/remove program.

There is no copy protection on the diskettes and they may be copied and distributed within a school where the school is in possession of a kit.

APPENDIX 1 - OUTLINE OF VIDEO

Outline of video

The video lasts 20 minutes. Two young presenters, Jennifer and Suzanne, conduct street interviews with students and three adults. Figures in square brackets are elapsed tape time in minutes.



[Start] The video commences with Suzanne and Jennifer introducing themselves and advising that they are going to look at the issue of problem gambling and find out why people get caught up in problem gambling and the effect it has on their lives.



[1.05] In the first street interview, Jennifer asks students what things they associate with gambling. The students' answers include examples of things we gamble on: horse and dog racing, casinos and cards - and money. They also mention bright lights and alcohol.



[1.25] In the next interview, Suzanne asks Jacques Boulet, former Associate Professor at the Royal Melbourne Institute of Technology, whether young people need to be educated about problem gambling. Jacques makes the points that there are risks associated with gambling and the young need to empower themselves by gaining some understanding of what is going on in the gambling process.



[2.35] Back to a street interview where Jennifer asks the students whether they consider gambling a problem like drugs and alcohol. The students are well aware that gambling can cause problems and mention addiction, poverty and loss of family.



[3.18] Suzanne then interviews Tim Falkiner, the former commercial/legal officer with the Victorian Casino Control Authority. She asks him why we need to know about problem gambling. He answers that we need to prevent people becoming problem gamblers and to enable people to better cope where they come into a relationship with a problem gambler.



[4.15] She then asks Tim what gambling is and he explains that it is the staking of money on random number generators such as roulette wheels, poker machines, race tracks and sporting competitions - things that combine randomness with a definite outcome.



[6.12] Suzanne asks if gambling is different to any other business. Tim replies that in normal transactions money is used to buy goods or services. In gambling, the focus of gambling is money. The gambler outlays money in the hope of getting back more money.



[7.42] Jennifer asks the students in the street how the gambling industry makes so much money. They raise the issues of: addiction, that the machines are "rigged" and that "they don't really tell you the probability".



[8.05] Suzanne asks Tim why the gambling industry can expect to make money if gambling relies on randomness. Tim explains, using a roulette wheel as an example, how the gambling is structured by the gambling supplier so that the supplier enjoys an advantage over the gambler. Using a computer simulation, Tim shows how over a large number of betting transactions even a small advantage for the gambling supplier will determine the cumulative result in its favour.



[11.01] Jennifer tells of how a few years ago her mother got caught up in problem gambling and that it really affected Jennifer's life and her family's.



[11.16] Suzanne then interviews Jennifer's mother, Gabriela Byrne, who was formerly addicted to poker machine gambling and who now runs a program for problem gamblers. [11.50] Suzanne asks Gabriela how problem gambling affected her life. Gabriela describes the problems caused to her and her family by her mood swings and money problems. She makes the point that the greatest loss was not the money but the change in her personality.



[12.45] Suzanne asks Gabriela why people become problem gamblers. Gabriela replies that people normally start because they have some personal problem, in her case, she was unhappy in her job. The distraction of gambling gave her a temporary solution to her problem. Also, she became addicted to the chemical high which gambling brings about.

[14.00] Suzanne asks for clarification and Gabriela goes on to explain how the environment of the gaming room gave excitement, also how she needed to bet more lines and more money to maintain that level of excitement. She also got excitement from diverting money from other sources to put into gambling. She wanted the feeling of excitement over



and over again. [14.50] Suzanne asks Gabriela what she is doing now and she explains how she is trying to help other problem gamblers and to inform people that gambling has the potential to ruin lives, like it nearly did hers.



[15.35] Suzanne asks Tim why people gamble if they are going to lose. Tim replies that in the short-term gamblers can win or lose but if they continue to bet against the odds for long enough they will lose. He gives an analogy with sport and describes how the feelings of anticipation, thrill and outcome - joy or disappointment - are similar in both in sport and gambling and how the ability to keep going in the face of disappointment works in gambling as it does in sport.



[17.20] Tim describes that there is a process by which problem gambling happens, how the problem gambler finds the activity enjoyable at the start but that over time, as losses mount, the problem gambler keeps gambling in the hope of getting a big run of wins to recover all the money - but this does not happen.



[18.40] Suzanne asks Gabriela what she would say to young people today. Gabriela replies that she hopes that young people who watch the video will make an educated choice and not fall into the trap which almost ruined her life.



[19.20] Jennifer and Suzanne wind up the video by telling their contemporaries that it is up to them to figure it out. Jennifer returns to mention that there are further written materials and software and invites the viewers to visit the Know the Odds Inc website at www.knowodds.org.

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## APPENDIX 2 - DEFINITIONS OF GAMBLING

### Gambling - Definitions

The following are some definitions of gambling:

1. *"Gambling is the determination of the ownership of property by appeal to chance"*

John A Hobson from a paper "The Ethics of Gambling" contained in "Betting and Gambling - A National Evil" edited by B Seebohm Rowntree Macmillan & Co 1906 at page 1

2. *"To gamble is to risk anything of value on a game of chance or on the outcome of any event involving chance, in the hope of profit."*

Peter Arnold "The Encyclopedia of Gambling" Collins 1978

3. *"Gambling may be defined as an activity in which a person subjects something of value - usually money - to a risk involving a large element of chance in the hopes of winning something of greater value, which is usually more money."*

William J Thompson "Legalised Gambling - A Reference Handbook" ABC-CLIO Inc 1994 at page 2

4. *"Gambling under the common law is any activity in which:  
(1) a person pays something of value, called consideration;  
(2) the outcome is determined at least in part by chance; and  
(3) the winnings are something of value."*

J Nelson Rose "Gambling and the Law" 1986 Gambling Times Inc at page 75

5. *"commercial gambling is the recreational staking of money on the outcome of a random number generator"*

Tim Falkiner, Chairman, Know the Odds Inc 1997

6. *"... but primarily it [gambling] is paying to enter a super-charged mood of excitement"*

David Spanier "Welcome to the Pleasuredome - Inside Las Vegas")  
University of Nevada Press 1992 at page 13

7. *"Gambling is an enchanting witchery, gotten betwixt idleness and avarice."*

Charles Cotton "The Compleat Gamester" the first English  
encyclopedia on gambling, published in 1674 - opening words.

8. *"In Zuckerman's opinion (1969) gambling is a form of sensation seeking 'in which individuals risk loss of money for the positive reinforcement produced by states of high arousal during the period of uncertainty as well as the positive arousal of winning'"*

Durand Jacobs PhD "A General Theory of Addictions" Paper No 2 in  
Shaffer & Ors "Compulsive Gambling - Theory Research and  
Practice" Lexington Books 1989 at page 44

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