National Gambling Board

a member of the dti group

A Profile of Youth Gambling in South Africa 2004

wits enterprise
THE NEW EDGE IN KNOWLEDGE MANAGEMENT

National Gambling Board

Contents

LIST OF TABLES

EXECUTIVE SUMMARY

The present project aimed at advancing the limited body of work on youth gambling in South Africa and aligning this data with global research trends.

Twenty-eight schools from all nine provinces participated in this initiative, which involved both a mass statistical survey of learners in Grades 10, 11 and 12, as well as extensive interviews with principals, teaching staff and learners aimed at generating qualitative data.

The project was conducted during late 2004, when the Wits University team and representatives of the National Gambling Board designed the sample survey. Principals at a range of schools reflecting the diversity of the educational system were then approached and invited to participate on the basis of strict confidentiality for themselves and their learners. The survey and the qualitative investigation were concluded in January/February 2005, with analysis of an unprecedented amount of data on the sociology and dynamics of youth gambling nation-wide.

Significantly, the survey suggested that South African youth gambling trends are in line with international trends. A total of 13.5% of students exhibited what can be described as a *mild-predisposition* to gambling, whilst 5.1.% indicated a *strong pre-disposition* to gambling. This points to a core of potential problem gamblers.

Students in poorer areas tended to play dice or other gaming activities which could be organized informally, and which offered significantly lower barriers to entry as well as less parental and other adult oversight. Students in wealthier urban areas were more likely to have access to and opportunity to engage in organized gaming activities, either with their parents' consent or simply by buying National Lottery tickets at local outlets, which seldom if ever asked them their age.

Both male and female students were found to partake in a multitude of different types of gambling activities, and both male and female students fell into the sub-set of gamblers with a strong predisposition to gamble. However male students were found to be significantly more likely to gamble on a regular basis, and to spend larger amounts of money doing so.

Both the qualitative analysis and the survey pointed to a cluster of characteristics that underpinned student gambling patterns. Students with a strong disposition to gamble were disproportionately likely to be victims of physical assault (from both parents and teachers), and to live in families where alcohol and gambling were widely tolerated.

Students who gambled excessively were also more likely to hold strongly narcissistic and fatalistic views on life; views which typically underpinned attitudes to sex and HIV-AIDS and other risk-taking behaviour. This points to the polyaddictive behaviour underpinning a range of contemporary social problems.

The results of the study provide a mechanism for integrating the South African experience of youth gambling with the mainstream global literature. Nonetheless, considerable follow-up research is required that shows in more detail how youth gambling reflects local circumstances shaped by our history, culture and transformative political experiences

It is essential that capacity-building work is undertaken to raise public consciousness among key stakeholders in developing a culture of responsible gambling. This includes parents, teachers in schools nation-wide, legislators, and clinicians and, in the last analysis the learners in all nine regions of South Africa. A programme to assist principals who are the critical link between learners and the wider community is especially important.

We also recommend that the gambling industry and the public sector assist with the extension of the present socio-demographic base-line study and with regional studies that allow for further analysis of youth gambling at provincial level.

The development of benchmarks against which the performance of the industry in further promoting these regulatory mechanisms arising from this culture of responsibility is of vital importance.

ACKNOWLEDGEMENTS

The National Gambling Board ("the Board") would like to thank Wits Enterprise and the research team members, Dr. Stephen Louw and Mr. Sello Mathabatha, for the work that they have done under the leadership of Professor Phillip Frankel.

This research would not have been possible without the active co-operation of many progressive educationists who were astounded, and then persuaded to the merits of this intervention. For understandable reasons, the principals of the targeted schools have preferred to remain anonymous, but this in no way diminishes their critical input in allowing the research team to put their learners under the microscope, in providing back-up (and often sensitive) information about school behaviours and, in most cases, providing the logistic infrastructure essential to mass sample surveys.

Last but not least, the Board would like to thank the learners who shared their views and experiences with regard to gambling. The Board hopes that this research will make a difference to their lives.

OVERVIEW: APPROACH AND SCOPE OF STUDY

Gambling – any behaviour that involves the risk of money or valuables on the outcome of a game, contest or other events based on chance – is a universally increasing phenomenon.

Under the encouragement of government agencies and other interests attracted to enormous revenues inherent in the gaming industry, gambling has become a universally accepted mainstream form of entertainment. Research indicates that the multiple forms of gambling are especially attractive to youth, particularly adolescent males in a post-modern age dominated by globalised media, mass markets, and conspicuous consumption. (Gupta and Derevensky, 1998a, Fisher 1990, Govoni, Rupcich and Frisch, 1996.)

At least 25 % of all new members in such organisations as Gamblers Anonymous in the UK are children or young people. (Fisher, 1993) Prevalence in this social sector is rising. Research also shows, more ominously, that

- The age/entry point for pathological gamblers is increasingly lower in many industrialised societies: Canadian studies show, for example, that most primary school learners have actually gambled at one time or another – with lotteries, bingo and playing cards for money. (Ladouceur, Dube, Bujold, 1994.)

- Problems of pathological gambling among the youth (some as young as ten) are substantially more intense than among adults.

- There is an increasing probability that routine gamblers among the young will develop into compulsive gambles at a more accelerated rate than their elders. (Gupta and Derevensky, 1997b: Wynne et al, 1996).

- Addictive behaviours such as alcohol, drug abuse and eating disorders are related to problem gambling. (Ladouceur, Dube and Bujold, 1994.)

It is extremely difficult to de-link "normal" from problem gambling. Prominent gambling screens such as the South Oaks Gambling Screen (SOGS) (Lesieur and Blume, 1987,1993: Stinchfield, 2001) and the DSM-IV (Lesieur and Rosenthal, 1991, Lesieur, 1994, Stinchfield 2003) often generate conflicting results, Moreover, there is a need for a standard instrument to transcend different spatial and temporal contexts. (Derevensky and Gupta, 1997: Sproston et al, 2000, Fisher 2000b).

Nonetheless, there is substantial and mutually reinforcing clinical and empirical evidence to suggest that money is not the predominant reason why older adolescents (17-19) – and even children – engage in gambling. (Derevensky and Gupta, 1996, 1998, Gupta and Derevensky 1998a/b) On the contrary, gambling is an important coping mechanism for many adolescents who tend to have relatively low self-esteem and high rates of depression. (Marget, Gupta and Derevensky, 1999).

- Gambling offers not only entertainment, but also opportunities for "action", fantasy, excitement and dissociative behaviours that allow impressionable young people to either elude responsibility or feel empowered in the face of daily stress and the wider problems of identity-formation. (Gupta and Devrensky 1998b)

- Involvement in the world of gambling can also be "inherited" from parents with a history of gambling, or be the result of peer pressure to engage in high-risk activity with "big win" potential. (Custer, 1982: Griffiths 1995)

Occasional gambling is not necessarily problematic *per se*. Nonetheless, subject to many complex factors of personality and social environment, any gambling has the potential to become driven, disordered, addictive, pathological and, in the last analysis, a problem for public health. This is especially the case among high risk-takers (who tend to pathological gambling) and among vulnerable groups such as women, ethnic minorities and youth. (Arnett, 1994, Breen and Zuckerman, 1996: Zuckerman, 1979, 1994), Zuckerman, Eysenck and Eysenck, 1978: Volberg 1994)

Among the latter, excessive gambling has many psychological and sociological consequences, including anxiety, withdrawal, mood swings, poor school attendance and work performance (Lesieur 1998, Ladouceur, Dube and Bujold, 1994), disrupted peer group relations, family breakdown, sexual promiscuity, substance abuse, delinquency and involvement with crime. Young problem gamblers, who "chase" debts, lie frequently, borrow and steal money to support their behaviour. (Gupta and Derevensky, 1998a, 1998b). Adolescents are particularly exposed to the loss of personal control, which is associated with heightened risk for suicide attempts and ideation. (Gupta and Derevensky, 1998a)

- Some studies have found that 80% of adolescents between 12 and 17 have gambled casually or recreationally in some form of wagering activity, and that about half this number do so on a regular basis. (Gupta and Derevensky, 1998a)

- Some 13% of this particular sample had gambling-related problems linked to possibly progressive addiction, 5% of which are deemed "serious". (Gupta and Derevensky, 1998a).

- It is now generally accepted that about 6% of young people exhibit serious gambling problems with a further 10% to 14% at risk of addiction or polyaddictions. (Shaffer and Hall, 1996, Gupta and Derevensky 1998a: Kusyszyn, 1972: Lesieur and Klein 1987).

- Prevalence rates of pathological young gamblers are two to four times that of adults. (Gupta and Derevensky, 1998a: Shaffer and Hall, 1996).

Problem gambling has tended historically to be seen as an adult phenomenon associated with major social costs (in the form of addiction and substance abuse treatment, higher social service policing and insurance costs etc). Nonetheless, the evident pre-occupation, popularity (and dangers) of gambling amongst children and adolescents fuelled extensive empirical research in the late-nineties into the incidence, dynamics, prevention and control of youth gambling in such countries as the United States, Australia, New Zealand, Great Britain and, above all, Canada.

Representative large-scale studies which deal with or allude to the specific socio-psychological features of adolescent gamblers include the work of the National Gambling Impact Study Commission (Washington DC, 1999), the National Opinion Research Centre (University of Chicago, 1999), the National Research Council (Washington, 1999), the Centre for Research Into the Social Impact of Gambling (Fisher 1992, 1993, 1998, 1999, 2000b: Miles 2001a, 2001b, 2002: Ettorre and Miles 2001), and a number of studies conducted under the aegis of the McGill University Centre for Youth Gambling Problems and High Risk Behaviours.

Since the late 1990's, problem gambling among young people has been seen as a sub-set of adult epidemiological issues associated with mental health, requiring major therapeutic strategies including cognitive behavioural therapy, psychoanalysis and pharmacology. (Politzer et al 1992: Sullivan et al 2002 and Harvard Medical School Division on Addictions, 2001,1)

Relative to the advanced industrialised nations (Canada, the United States, the United Kingdom, Australia, etc.) little gambling research has been conducted into "normal" gambling behaviour, the gambling experience, motivations for gambling, its social meaning and the satisfactions and rewards people derive from gambling behaviour. Nonetheless, some work has been done recently by such organisations as the South African Community Epidemiological Network on Drug Usage and the Department of Community Dentistry at the University of Pretoria; the National Gambling Board – NGB (Economic Impact of Legalised Gambling in South Africa, 2003); and the National Centre for the Study of Gambling at the University of Cape Town, working under the aegis of the National Responsible Gambling Programme – NGRP (Collins and Barr, 2001). Although this research has focussed primarily on the economic impact of gambling (see also A.A. Ligthelm, 1999), it sheds important light on adolescent gambling trends and can assist in the development of a framework within which the industry and government can promote responsible gambling.

The recent NGB report, for example, makes the following observations:

Gambling activity in South Africa across all modalities decreases in general proportion to age and the prevalence of gambling is most intense in the 18 to 30 year category.

MODE	18 - 30	31-40	41-50	51-60	60+	Total Population
National Lottery	78.1%	76.1%	67.5%	56.4%	56.7%	71.3%
Casino Gambling	23.0%	22.0%	15.6%	12.1%	15.2%	19.4%
Wagering (Horse-betting)	17.6%	17.7%	13.5%	11.1%	8.1%	15.3%
Sports Betting	3.5%	1.5%	2.3%	2.5%	0.6%	2.3%
Bingo	10.8%	9.4%	2.5%	2.3%	3.1%	7.2%
Internet/On-line gambling	0.2%	1.0%	0.5%	1.4%	0.0%	0.6%
Other	1.1%	3.3%	2.6%	3.6%	1.5%	2.4%
None of the above	20.8%	22.6%	31.5%	41.7%	42.9%	27.6%

(NGB 2003, p. 23)

Table 1: Age Group: National gambling activity

This conforms largely to the international experience (bearing in mind the variation in age groups used in different studies):

Country	Date	Gambling Mode	18-30	31-40	41-50	51-60	60+	Total
South Africa	2002	Casinos	37.3%	33.4%	16.0%	6.8%	6.5%	100.0
			18-24	25-35	35-49	50-64	65+	Total
Australia	1999	Poker/ Gambling machines	26.0%	19.0%	25.0%	20.0%	9.0%	100.0
		Table machines	34.0%	27.0%	21.0%	13.0%	4.0%	100.0
			18-25	26-35	36-45	45-55	55+	Total
New Zealand	1997	Auckland Casino	17.9%	27.9%	22.9%	13.7%	17.6%	100.0
	1997	Christchurch Casino	15.1%	22.1%	23.6%	21.2%	18.9%	100.0
			18-24	25-44	45-64		65+	Total
USA	1998	All modes	12.0%	46.0%	25.0%		16.0%	100.0

(NGB, 2003, p. 81)

Table 2: International gambling activity – profile by mode and by age

In conformity with international experience, participation in gambling correlates positively with education: the less schooled people – ostensible including youth – appear to gamble the least, the more educated the most.

Country	Year	Gambling Mode	No formal schooling	Primary (Gr 1-7)	Secondary (Gr 8-12)	Tertiary (Post-matric)	Total
South Africa	2002	Casinos	3.0%	12.9%	55.3%	28.8%	100.0%
Australia	1999 1999	Poker and Gambling machines Table games		Year 10 or less 26.0% 17.01%	32.0% 29.0%	43.0% 55.0%	100.0% 100.0%
New Zealand	Auckland Christchurch	Casinos Casinos			40.8% 47.4%	42.5% 30.8%	100.0% 100.0%
USA	2001		No College 45.0%	Some College 30.0%		Bachelors and Post-Bachelor 25.0	100.0%

(NGB 2003, p. 83)

Table 3: International gambling activity – profile by mode and by education

Newer generations are socialised to accept gambling as routine social activity. (AGA, 2002,3). A relatively high percentage of young South Africans regard gambling as acceptable behaviour.

View	18-30	31-40	41-50	51-60	60+
Acceptable to me	75.9%	76.3%	73.0%	63.3%	60.0%
No acceptable to me but have no objection to gambling by others.	11.3%	10.7%	13.5%	12.2%	17.1%
Not acceptable to me	12.8%	13.0%	13.5%	24.5%	22.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

(NGB 2003, p.30)

Table 4: South African attitudes to gambling – general

Young South Africans perceive casino gambling as an important leisure activity: they also purchase lottery tickets with greater frequency than any other age group.

View	18-30	31-40	41-50	51-60	60+
Disagree	20.7%	20.9%	27.9%	28.6%	32.4%
Agree	57.9%	55.8%	43.0%	49.0%	43.3%
Can't say/Don't know	21.4%	23.3%	29.1%	22.4%	24.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 5: South African responses to the statement: Casino gambling is an important leisure activity. Per age.

Frequency	18-30	31-40	41-50	51-60	60+
Twice a week	61.9%	64.8%	58.1%	46.7%	47.6%
Once a week	26.5%	21.9%	24.2%	26.7%	23.8%
Once every two weeks	2.7%	2.9%	3.2%	6.7%	9.5%
Once a month	6.2%	4.8%	8,1%	10.0%	4.8%
Less often	2.7%	5.6%	6.4%	9.9%	14.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

(NGB 2003, p. 32)

Table 6: Frequency of buying lottery tickets.

Ultimately, it is estimated that a quarter of young South Africans, some as young as Grade 8, gamble, mainly in the form of betting on card games. (See Sunday Times, Metro - Johannesburg, October 17th, 2004)

Data of this nature is valuable, although it does not constitute a set of testable hypotheses about the prevalence of gambling and its dynamics among South African adolescents and children. The NGB study was not to meant to study youth gambling and, while it provides some insights into late-adolescence, its legalistic presumption that younger people do not gamble excludes a major constituency, many of whose members engage in illegal "proxy" activity. On the other hand the (far more limited) Pretoria research is too narrow in its focus on only a small and select sample of 585 Grade students in 3 Gauteng locations. (For this reason, this can be regarded as "suggestive research" about youth gambling in the report that follows.)

Ultimately, no national, relatively comprehensive, study of youth (or under 18) gambling has been conducted in South Africa to date.

The present study is therefore the first of its kind. The study seeks to:

- Align youth gambling in South Africa with the international literature – at least partially,
- Generate provisional information, subject to further empirical verification and longitudinal testing,
- Encourage the local industry and public sector in the development of advanced research and capacity-building programmes and partnerships geared to the social and medical management of youth gambling.
- Assist the gambling industry to make informed decisions regarding gambling regulation and management in compliance with the provisions of recent national legislation.

The study was commissioned by the National Gambling Board of South Africa in May 2004, against the background of the aforementioned, which suggests that both elementary and secondary school children are active participants in gambling-related activities, and indeed, that these students engage in gambling more frequently than any other potentially addictive behaviour. (Gupta and Derevensky, 1998a)

Conceived in these terms, the study does *not* claim to deal with all youth in South Africa, but only with those within the education system, particularly learners at its upper-end, in Grades 10,11 and 12. The selection of this target was proposed by the NGB on the basis of the belief that these students constitute both a key group on the brink of adulthood and a "bridge" between childhood, adolescence and the adult world.

Within this context, the study examined:

- The socio-demographics of the target adolescents:
- The incidence and prevalence of various modes of gambling among target learners:

- The social universe (family, school and peer groups) of both participant/gambling and non-participant youth:
- Self-definitions and perceptions of life-style:
- Gaming orientations with emphasis on risk-taking and modalities of preference.

The research project was initiated in late 2004 and involved, in the first instance:

- Identification of a representative target of schools in all nine provinces of South Africa:
- Facilitation with targets to ensure project participation in a mss sample survey of Grades 10,11 and 12 learners:
- An international and local literature scan:
- Survey design in collaboration with the research arm of the NGB:
- Focus-groups and survey calibration:
- Survey dissemination to target schools:

Twenty eight (28) schools on a nation-wide basis formed the overall target of this base-line study. Schools were selected across a representative range of public, independent and technical institutions, with due regard to the proportionate regional distribution of Grade 10, 11 and 12 learners, gender variables, spatial factors of an urban/rural nature, and different patterns of cultural composition.

For the most part the survey was conducted in English.

Almost without exception, participant schools requested a tailored and confidential briefing on project-completion, enhanced capacity building to deal with individual and institutional problems thereafter, and, overall, complete anonymity.

The following table provides an overall macro-view of the participant schools. (It is not possible to identify schools by name, in order to protect their anonymity):

Region	Public Academic Schools	Private/Independent Academic Schools	Technical Schools
Western Cape	4	0	1
Eastern Cape	3	0	0
Northern Cape	0	1	0
Free State	2	1	0
KwaZulu-Natal	5	0	0
Gauteng	2	3	0
North-West	1	0	1
Mpumalanga	2	0	0
Limpopo	0	2	0
Total	19	7	2

Table 7: Participant schools – Provincial distribution of sample

The mass sample survey was conducted on-site, in classrooms, either by principals or appropriate senior staff – such as "guidance" teachers, who had been briefed on the purpose and mechanics of the intervention. In some cases, our project staff oversaw the distribution, completion process and collection of surveys at the administration point, but in most cases teaching

staff preferred to take direct responsibility. Ultimately, a total of 12,782 surveys were returned by November 2004, an exceptionally high response rate

Of these, a representative sample of 4,057 were selected for statistical analysis.

Supportive interviews with key stakeholders (see below) were conducted from July to December 2004.

Three factors critical to the methodology, the spirit, substance and findings of the need to be emphasised at outset.

Most prevalence and epidemiological research into gambling involves purely quantitative analysis, which obscures the complex nuances of human behaviour. The approach however involved not only the accumulation of quantitative data through the mass sample survey, but also the gathering of additional and enriching qualitative information through extensive structured interviews and focus groups with primary stakeholders in the project. This work to expand the depth of the project included dialogue with various educationists, most of the principals and relevant staff in the target schools, public sector officials (particularly those in psychological support services), and perhaps most importantly of all, many adolescent learners who, without admitting to the compulsive gambling, implied or admitted readily to behavioural and life-style problems of a gambling-related nature.

Although many educationists were initially (and characteristically) sceptical of the addictive dangers of gambling relative to more familiar problems such as substance abuse, sexual promiscuity and HIV/AIDS in schools, their eventual co-operation with the project was critical to its roll-out, from inception to the last stages of analysis. As for the interviewed adolescents, the project could not, by nature, accommodate many of the personality correlates of youth gambling. Many in this portion of the sample nonetheless displayed the socio-emotional characteristics of at-risk gamblers situated along the continuum between “normal” and pathological behaviour. (Vitaro et al, 1998: Arnett, 1994: Zuckerman, 1979: Marget, Gupta and Derevensky, 1999)

Secondly, studies of adolescent gambling clearly suggest that youth have a distinct if over-lapping sociological profile relative to older gamblers that is decisive in shaping their needs, concerns, behavioural difficulties and developmental interests. The intervention was not only concerned with prevalence issues but also with mapping out this profile within the specific framework of what is still, at this point, an intrinsically African and early democratic society. The relationship between HIV/AIDS, sensation-seeking and high-risk gambling activity by often impetuous young people clearly requires some analysis in a society where HIV/AIDS is both widely prevalent and impeded by widespread incapacity and institutional under-development in the management of public policy.

This raises the third point: it is vital to remember that youth gambling in South Africa occurs in a social environment that is fundamentally different from that confronting the youth in the highly industrialised countries within which nearly all of the studies of gambling behaviour have been conducted. South Africa has not remained insulated from contemporary mass consumerism which impacts on gambling behaviour by people of all ages. Some local studies have also touched on uniquely indigenous and informal modes of gambling. (Collins and Barr, 2001) Nevertheless, South African gambling behaviour in the rural, peri-urban and even urban areas arises from socio-economic and, in particular, cultural networks that are qualitatively different, if not inexplicable when seen from the perspective of the UK, Canada or Britain. Whilst the study drew on comparative experience and insight, it sought consciously to avoid the danger of simply transplanting modes of inquiry, analysis and interpretation from the most highly developed societies into the local context.

In the main body of the work we frequently refer to various instances where culture and the post-apartheid political environment impact upon adolescent attitudes and behaviours related to gambling. In contemporary South Africa, perceptions of risk among all categories of society are, for example, inextricably linked to fluctuating feelings of optimism and fatalism characteristic of a location that has recently emerged from a situation of deep crisis. This is particularly true of people who remain mired in poverty, inequality and disease despite (or possibly because of) inflated expectations at the decade-old point of political liberation. This includes, and is perhaps most pertinent to, younger members of the community who may (or may not) gamble.

Needless to say, South Africa is also a very diverse society, whose complex and multiple cultures generate often vastly different understandings of the means and ends of social mobility, personal empowerment and collective advancement. Having said this, far more work remains to be done to explore the socio-cultural construction of gambling among different groups of adults and adolescents in the peculiar context of the post-apartheid political environment.

The following is base line or indicative research whose purpose is to generate a variety of hypotheses subject to further confirmation. Its main body consists of three parts that follow:

As any other behaviour, youth gambling is socially expressed.

- **Section One** provides a thorough overview of the main results. The section summarises both the qualitative (interview) and the quantitative (survey) components of the study. The survey identifies those categories of learners who have (or do not have) some form of predisposition to gamble within the overall framework of contemporary society.

- **Section Two** builds on this discussion, and provides a more statistically oriented breakdown of patterns of youth gambling behaviour, focussing on core demographic variables (race, income, class, gender) and key behavioural patterns, including average gambling-spend, parental influences, and attitudes to risk and narcissism.

- **Section Three** summarises the key findings and addresses possible pathways to address both the research and policy challenges posed by adolescent gambling. Whilst the research mandate does not include the design of an action-plan for enhanced management of responsible gambling, we suggest – in conclusion - a number of items that may be incorporated into such a plan. This is based on the belief that the effective regulation of youth gambling requires collaboration between all key stakeholders – parents, schools, the state, the gambling industry, legislators, clinicians and, not the least, the at-risk adolescents themselves.

METHODOLOGY

The study is intended to measure students' attitudes to gambling. It is, therefore, based on perceptions; in other words, on beliefs, opinions and attitudes held by students. These perceptions were measured in two ways, through a quantitative survey and through a series of detailed qualitative interviews with students and their teachers.

Ultimately, 12,782 students were surveyed. Using random sampling techniques, 4,057 of these surveys were analysed in this report. Although it is probably that some students lied in the report – perhaps deliberately overstating or understating their propensity to gamble out of a sense of bravado or shame, the sample size is more than sufficient to overcome such bias, and presents a good overview of what high school students think about gambling, and how and when they participate in gambling activities.

The intention of the survey, it must be stressed, was to learn as much as possible about patterns of youth gambling patterns and attitudes to gambling in general. This information is important, and can be used to develop more sophisticated and appropriate ways too address problem gambling.

Section One: The Sociology Of Youth Gambling

1.1 General Social Context

1.1.1 Aggregate demographics – the school and the learners

The final sample (4057) learners were drawn from of 28 schools in the nine provinces of South Africa. The number of respondents per school ranged from 65 pupils in one of the smaller independent schools in the Free State (constituting 1.6 % of the total sample) to 207 learners (5.1 % of total sample) in one of the larger public schools in the Western Cape. The ratio per province and per independent schools is contained reproduced both above and below:

Seven (7) of the target schools were private/independent institutions and learners from two (2) technical secondary schools were included in the sample.

Region	Public Academic Schools	Private/Independent Academic Schools	Technical Schools
Western Cape	4	-	1
Eastern Cape	3	-	-
Northern Cape	-	1	-
Free State	2	1	-
KwaZulu-Natal	5	-	-
Gauteng	2	3	-
North-West	1	-	1
Mpumalanga	2	-	-
Limpopo	-	2	-

Table 8: Target schools – breakdown by type

While the clear distinction between cultural categories per school has been blurred by integration, the process is still incomplete ten years after the advent of democracy. All South African schools still have a racial character in that certain groups predominate. Further to consultations with principals and for heuristic purposes, we would loosely classify the targets as follows:

REGION	Predominant African	Predominant White	Predominant Coloured	Predominant Indian
Western Cape	-	2	3	
Eastern Cape	1	1	1	
Northern Cape	1			
Free State	1	2		
KwaZulu-Natal	1			4
Gauteng	3	1		1
North-West	2			
Mpumalanga	2			
Limpopo	2			

Table 9: Sample demographics – breakdown by race

Although most of the participating schools were co-educational, a number of single-sex schools, as well as an essentially Afrikaans and a private Hindu school were included in the sample. Several independent elite (and predominantly white) schools were chosen as a counter-point to (predominantly African) schools in rural areas.

1.1.2 Aggregate demographics - gender

The sample was divided fairly evenly between male and female.

GENDER	
Female Learners	49.3% (N = 2001)
Male Learners	42.7% (N = 1732)

Table 10: Sample demographics – breakdown by gender

1.1.3 Aggregate demographics - grade

Almost half the sample (44.2 %), consisted of Grade 10 pupils, but Grades 11 and 12 were also well represented – despite the logistic difficulties of conducting the survey in the run-up period to year-end examinations.

GRADE	
Grade 10	44.2% (N = 1623)
Grade 11	39.3% (N = 1443)
Grade 12	16.4% (N = 603)

Table 11: Sample demographics – breakdown by school grade

1.1.4 Aggregate demographics – age

An insignificantly small proportion of learners were younger than 15 years of age. Most students (63.1 %) fell into the 16/17-year range, The remainder of the sample (22.8%) consisted of 18 and 19-year old late-adolescents.

AGE	
15 Years	12.9% (N = 415)
16 Years	31.0% (N = 997)
17 Years	32.1% (N = 1032)
18 Years	15.1% (N = 484)
19 Years	7.7% (N = 246)

Table 12: Sample demographics – breakdown by age

1.1.5 Aggregate demographics – population group

Learners were asked to self-define their population group and, on this basis, approximately half the sample (48.6 %) labelled themselves as "African". The other population groups were well represented in aggregate with concentrations in some provinces reflecting historic divisions in the South African population. Thus, most of the 16.4 % of "Coloured" students were from target schools in the Western Cape: many of the 12.9 % of the "Indian" students originated in schools in the KwaZulu-Natal area. Only a small proportion of white learners were located in rural schools.

RACE	
African	48.6% (N = 1972)
White	18.1% (N = 735)
Indian	16.4% (N = 667)
Coloured	12.9% (N = 522)

Table 13: Sample demographics – breakdown by race

1.1.6 Aggregate demographics – spatial location

Subject to loose and heuristic distinctions between "urban and "rural", the following classification emerges:

REGION	Urban Schools	Rural Schools
Western Cape	3	2
Eastern Cape	1	2
Northern Cape	1	
Free State	2	1
KwaZulu-Natal	4	1
Gauteng	5	
North-West		2
Mpumalanga	2	
Limpopo	1	1

Table 14: Spatial location of target schools

The distribution of learners per province is reflected below:

REGION	NO OF TARGET LEARNERS
Gauteng	821 (20.24%)
KwaZulu-Natal	816 (20.11%)
Western Cape	801 (19.74%)
Eastern Cape	436 (10.75%)
Free State	386 (9.51%)
North-West	240 (5.92%)
Mpumalanga	219 (5.40%)
Limpopo	193 (4.76%)
Northern Cape	145 (3.57%)

Table 15: Distribution of learners by Province

1.2 The Familial environment

1.2.1 Aggregate demographics – family structure

The study was concerned with issues of social control and therefore examined different types of adult or parental authority within the household.

Just over half the respondents (54.2 %), indicated that they lived with both biological parents in a nuclear family. Nonetheless, a significant 26.4 % of learners lived in a single maternal environment centred on a biological mother. In the predominantly African schools, a significant number (54.2 %), well beyond the norm, norm lived without biological parents, particularly in the rural schools. Principals in many of the latter frequently referred to the absence of paternal authority in the home as a major source of indiscipline, lack of drive and focus among learners. In two rural schools, school staff spoke of learner gambling as one of the many consequences of their incapacity to control behaviour among male students habituated to weak authority systems in the family environment.

Almost 10 % of the sample lived with a relative, whilst a small proportion (1.00 %) appears to live without any adult control whatsoever. Once again, this is particularly evident in the rural areas of KwaZulu-Natal and the Eastern Cape, where HIV/AIDS mortalities have often left family systems entirely dependent on children in middle to late-adolescence. School staff in the targets expressed particular concern about anti-social behaviours of all types emerging from these parentless households.

Similar problems also appear to exist at a more limited level in some of the urban schools in the Ethekwini (Durban) metropolitan area. Here, according to local educationists, the issue is less the impact of HIV/AIDS than high levels of community and familial instability.

HOUSEHOLD ADULT	
Both biological parents	54.2%
Biological mother only	26.4%
Biological father only	4.6%
Adopted parents	0.9%
Stepfather/stepmother	0.7%
Other relative	9.2%
No adults	1.0%

Table 16: Parents that students live with most of the time

1.2.2 Aggregate demographics – parental communication

Parental communication appears to be relatively satisfactory, with 73.0% of the respondents indicating that they could discuss problem issues with either both parents (34.4 %) or their mothers. Communication with father figures appears to be poor (5.0 %). This is indicative of general systems of authority within many families.

With due regard to "natural" inter-generation tensions, a cause for concern derives from the fact that almost a fifth (18.8 %) of the sample experience difficulty in talking with either parent at all. We detected particularly strong evidence of these communication breakdowns in historically white schools in urban areas, as well as schools offering boarding facilities.

In our qualitative interviews, many of the learners who emerged as disposed to gambling, specifically cited a lack of opportunity to discuss their problems with parents as both a source and a consequence of their decision to gamble. A significant proportion of learners with discernable gambling problems independently referred to the inability of parents to recognise the financial and moral difficulties arising from their situation – especially in households, communities or sub-cultures where one or both parents themselves are gamblers.

HOUSEHOLD ADULT	
Both parents/adults	34.4%
Mother/female adult	38.6%
Father/male adult	5.0%
Cannot talk to parents	18.8%

Table 17: Parents that children are most able to speak to about their problems

1.2.3 Aggregate demographics - parental gaming

Gambling behaviour is partially transmitted from role models, and, in the circumstances, the study was concerned with analysing gaming orientations on the part of fathers, mothers, older brothers and sisters in the immediate family. This was evaluated subjectively, i.e. through the evaluations of the learners themselves.

Predominantly African rural schools are significantly higher than the norms on all of these indices. Learners in these schools allege that family-wide gambling behaviour of one sort or another is widespread and this was confirmed in our qualitative interviews with principals and other concerned staff in all of the nine regions under analysis. Mothers appear to gamble somewhat less, but fathers and siblings, including older sisters, are referred to frequently as role models, both by adolescents who gamble and those who do not. In the poverty-struck Eastern Cape, we found fairly extensive evidence of family syndicates where parents and their offspring pool finances regularly to participate in the national lottery on a life-style basis. In the North-West schools, many learners refer to being habituated to gambling by older male siblings and their fathers in particular. A proportion of intra-family conflict appears to arise from children (or mothers) who oppose the 15.8 % of fathers who are

perceived to gamble "too much". Principals and guidance teachers, who refer to gambling as a component of the struggle for resources in historically disadvantaged households, confirm this.

ADULT	Yes	No
Adult/mother gambles too much	9.2%	90.8%
Adult/father gambles too much	15.8%	84.2%
Older brother gambles too much	12.8%	87.2%
Older sister gambles too much	11.2%	88.8%

Table 18: Students' perception of adult gambling

1.2.4 Aggregate demographics – parental alcohol consumption

Perceptions and conflicts related to alcohol consumption are important indicators of family dynamics, including poly-addictions that impact on group stability and inter-personal relationships within the family.

From the indicative information provided by learners it appears that excess alcohol consumption within the family is problematic across the population groups, especially among the historically disadvantaged. Very high readings were obtained from learners in predominantly African rural schools, particularly in the cases of fathers and older brothers. Intra and inter-household tensions at the nexus between alcohol consumption and gambling were also detected in the pre-dominantly Indian schools that formed part of the sample. In predominantly "Coloured" schools in the Western Cape, alcohol-related gambling is also in evidence, especially in the rural areas. Principals and staff in these schools refer openly to parents who gamble as a means to support alcohol-driven life-styles or to cases of children who are obliged to become economically active in early adolescence in order to support parents and older siblings who live in a mutually reinforcing gambling and alcohol sub-culture.

ADULT	Yes	No
Adult male/father drinks too much	20.6%	79.4%
Adult female/mother drinks too much	7.7%	92.3%
Older brother drinks too much	21.1%	78.9%
Older sister drinks too much	8.4%	91.6%

Table 19: Students' perception of adult drinking

1.3 The school environment

1.3.1 Aggregate demographics – school orientation

Attitudes towards the school experience were positive among more than three-quarters of the sample (78.9 %). Nonetheless, almost a fifth of learners (18.7 %) indicated that they disliked school with varying degrees of intensity. 5.7 % aggressively and openly indicated that they disliked their schools in all its manifestations. Reference was made, by teachers in some cases, to anti-social behaviours designed to express these negative feelings – including gambling as a manifestation of rebellion.

Antagonism towards school was substantially less widespread in the predominantly African schools (although there was some impressionistic evidence to suggest that learners were often frightened to display their feelings in the survey instrument). For the most part, negative feelings towards schooling were most intense in the relatively more privileged target schools across the board. One of the few predominantly white Afrikaans-medium schools in the sample displayed a substantially above-norm reading when learners were asked to clarify their sentiments about their school. One of the few all-girls schools also measured much higher than average on this measure.

STATEMENT	
I like school very much	44.1%
I like school quite a bit	34.8%
I don't like school very much	13.1%
I hate school	5.7%

Table 20: Attitudes to school

1.3.2 Aggregate demographics – future planning/fatalism

Approximately one in eight learners (12.3%) do not intend to pursue tertiary education and a further 4.2% have no definite plans for their post-school existence. Many principals in our qualitative interviews suggested that a good proportion of this group could be regarded as "problem-learners". This was particularly the case in the independent schools, where some principals appear to conflate poor contingency planning for tertiary education with a lack of drive and learner under-development

The great majority of learners have however developed a strong identity with their schools and with the principle of advanced education.

STATEMENT	
Finish school and study further	81.2%
Finish high school and not continue studying	7.4%
Quit school as soon as possible	4.9%
No plans after I finish school	4.2%

Table 21: Attitudes to the future: fatalism

1.3.3 Aggregate demographics – peer group orientation

Peer group relations appear to be fairly solid since the overwhelming mass of learners (84.8%) inter-identify fairly strongly.

Over 12% of respondents appear to have difficulty in forging positive peer relations, particularly in schools where there is a high level of multiculturalism that coincides with class differences. This was especially (but not exclusively evident) in the urban Indian target schools, particularly in communities that have experienced rapid residential integration. When questioned on the dynamics of adolescent gambling in these cases, teaching staff frequently referred to ethnic clustering and definition of gambling modes. Thus, in a single school, the Indian children would pool resources for the national lottery while African children would associate with their ethnic peers for the purpose of flipping coins or throwing dice.

We also found evidence of gambling-driven trans-ethnic peer relations in our qualitative interviews. Staff in one historically-white public school in Gauteng pointed to the anomaly of racial separation within the school and inter-racial planning among learners to secure access to local casinos. Staff from another similar institution in Mpumalanga also noted a similar pattern when observing inter-racial co-operation among learners in a nearby casino car-park.

STATEMENT	
Like quite a bit	44.4%
Like very much	40.4%
Don't like much	9.9%
Hate	2.8%

Table 22: Attitudes to peers

1.3.4 Aggregate demographics – teacher orientation

Teachers are an important source of authority and attitudes among learners, but learner orientation towards teachers are fairly equivocal.

In the pre-dominantly African schools there was very little criticism of teachers at any level, particularly in the rural schods where teaching staff exercise authority through a mixture of fear and respect. In some of these institutions, teachers appear to be prolific gamblers. This is significant, given the important influence of teachers, as role-models in learners' lives. .

An overall one-third of respondents (34.9%) evaluate teachers as "interested" in their pupils whilst a similar (33.1%) believe teacher identification with their role- requirements and responsibilities to be the exception rather than the rule. "Respect" for

students is also ambiguous. These feelings are widely voiced in the public school system, particularly in some of the historically white and predominantly Indian schools. Similar divided readings are obtained on issues of "respect".

In general, there appears to be a high level of variation – in aggregate and on a school-by-school basis.

STATEMENT	All	Most	Some	A few	None
Teachers are interested in me as a person	12.5%	22.6%	31.8%	23.3%	9.8%
Teachers show respect for their students	18.0%	32.1%	26.7%	19.4%	3.8%

Table 23: Perceptions of teachers' attitudes to students

1.4 Selfhood and life-style

1.4.1 Aggregate demographics – self definition

The nature of our mass sample precluded micro-analysis of individual learners – although we conducted many one-to-one interviews with students to add some texture and nuance to the analysis.

Bearing in mind the conventional problems facing adolescents in the creation of a sense of identity, the greater majority of learners appear to be relatively stable. Approximately half the sample (56.9%) have a strong sense of personal satisfaction or of comparative functionality (48.0%). Readings on personal worth and capability are comparably high. (41.8 and 57.9% respectively)

Almost one-third of respondents (32.2%) "feel that I am no good" – in a manner that suggests fairly widespread insecurity and incapacities of personal and social performance. Many learners clearly feel pressures to compete and conform, especially in some of the independent schools. Feelings of personal deficiency which motivate 18.4% of the sample to "feel that I cannot do anything right" are especially marked in the latter, especially among white learners who feel compelled to meet self, parentally or institutionally-imposed "standards" of competency. Interviews with school psychologists indicated that many white learners who were disposed to gambling and other anti-social behaviour tended to view gaming as a compensation for performance incapacity in a newly-multicultural school environment.

STATEMENT	Strong disagree	Disagree	Agree	Strongly agree
I usually feel good about myself	4.8%	6.1%	32.1%	56.9%
A am able to do things as well as most people my age	6.4%	7.8%	37.8%	48.0%
Sometimes I think I am no good	41.8%	26.0%	18.0%	14.2%
I feel I cannot do anything right	57.9%	23.8%	10.8%	7.6%

Table 24: Students' self-definition

1.4.2 Aggregate demographics – experience of violence

The majority of learners have not experienced any form of serious assault either in the family or school environment. Having said this, almost a fifth of the sample allege violence, perpetrated either by teachers (17.2%) or by parents/adults (18.2%) at home.

The level of reported assaults by parents rose to almost a quarter (24.9%) in the Eastern Cape. The highest level of assaults at school could be found in the North West Province, where just over a quarter (25.8%) reported having being assaulted seriously by a teacher.

Teacher violence sufficient to produce "marks" or induce deep anxiety was especially evident in the predominantly African schools – both in the urban and rural environment. Questioned on these allegations, teaching staff fell back on a number of conventional legitimations, including learner indiscipline, teacher frustration arising out of poor service conditions and the lack of a "culture of learning" among students. While some teachers drew attention to distinctions between physical and

psychological violence, few actually denied the use of the former when questioned in private. Fairly widespread references to teacher assault were also made in some of the independent schools, although here the emphasis was more on emotional abuse.

Parental violence in the home is marginally more widespread. The alleged incidence appears substantially higher among learners in Coloured schools in the Eastern and Western Cape, particularly in rural communities where there are parallel factors of poverty and social dislocation. Principals from these areas pointed to the mutually-reinforcing nature of domestic and school violence as well as the widespread incidence of abuse, indigence and substance abuse in the home environment.

	Yes	No
Parents/Responsible adult at home	18.9%	81.1%
Teachers	17.2%	82.8%

Table 25: Have any of the following people ever hit you so hard or so often that you had marks or were afraid of?

1.4.3 Aggregate demographics – substance consumption

Drug, and in particular, alcohol usage was found to be relatively widespread among learners – both on an experimental and a sustained basis. Almost half the sample (47%) admits readily to having used excess alcohol at some point, whilst 14.7% appear to be imbibers on a fairly regular basis. This appears to be especially evident in urban schools, particularly among adolescent males who were quick to impress interviewers with their "experience" during focus groups.

Given the social mainstreaming of alcohol it was far easier to obtain accurate data than in the case of drug usage. On the basis of impressionistic information provided by school staff, the fact that an overwhelming number of learners (83.9 %) claimed to avoid narcotics should be treated with some circumspection – especially in rural schools where respondents were often reluctant to disclose sensitive information. Bearing this in mind, however, one tenth of the sample (10.4%) appear to use drugs either irregularly (or experimentally), while a further 5.7% openly admit to usage on a relatively ongoing basis. Interviews conducted with staff and students in predominantly Indian target schools targets suggested that they were faced with an emerging drug rather than alcohol-related sub-culture.

ACTIVITY	None	Once or twice	Often
Too much to drink	53.0%	32.2%	14.7%
Used drugs	83.9%	10.4%	5.7%

Table 26: Alcohol and drug consumption in the past twelve months

Broken down regionally, the schools that reported the highest level of alcohol consumption ("often" drank too much), were in the Western Cape (22.4%) and Mpumalanga (19.4%).

1.4.4 Aggregate demographics – extra-mural activities

Dancing, listening to music, television-watching and the ubiquitous "hanging out with friends" are activities of preference in the extra-mural life of learners of all ages. More demanding activities related to sport and work are understandably lower down the scale of preference – although this varies on an inter-school basis, largely dependent on the availability (and accessibility) of recreational networks.

Gambling does not figure highly on the comparative recreational listing.

It is nonetheless significant that the sample corresponded loosely with universal trends where approximately 5% of youth can be classified as pathological gamblers and a further 12 to 18% are seen to participate in recreational gambling on a persistent or random basis.

Thirteen and a half percent (13.5%) of this sample indicated a pre-disposition to gambling (they "liked gambling a little"): 5.1% indicated a strong pre-disposition to recreational gambling – they "liked gambling a lot". Almost one-in-five learners (18.6%) fall into these combined categories.

ACTIVITY	Don't Like	Like a little	Like a lot
Homework or study	28.7%	51.1%	20.2%
Dance/Listen to music	2.9%	17.3%	79.8%
Play sport	19.1%	40.3%	40.6%
Watch TV	5.8%	36.6%	57.7%
Play computer/videogames	22.9%	38.9%	38.3%
Read books for pleasure	24.4%	41.9%	33.2%
Work to make pocket money	25.4%	38.7%	35.9%
Hang out with friends	5.1%	22.7%	72.3%
Gamble	81.3%	13.5%	5.1%
Do community work	48.1%	39.8%	12.1%

Table 27: Extramural activity

1.4.5 Aggregate demographics – computer access

Roughly half the sample (51.4%) have access to computers at home. This, no doubt, contributed to the fact that 38.3% of learners appear to use video/computer games on a fairly regular basis – either in the home, or, in many cases at external outlets, in arcades, cafes and shopping centres.

USE OF COMPUTER AT HOME	
Yes	51.4%
No	48.6%

Table 28: Computer access

1.4.6 Aggregate demographics – risk – HIV/AIDS orientation

Risk is an essential component of gambling behaviour, particularly among low-income gamblers who spend large amounts of money in servicing their recreational habits. Risk is also especially important to adolescents where gambling choices are often (but not always) the result of miscalculations of risks, costs and benefits.

Risk can be indicated in various ways, for example, sexual behaviour in high-risk conditions. It was with this is mind that we posed questions to learners about the prevalence of condom use within the context of the current HIV/AIDS pandemic.

The results show that not all learners are conscious of the need to "condomise". Indeed, in a manner suggestive of attitudes towards generalized risk, a substantial minority – 17.6% of the sample – believe that "people should enjoy life and stop worrying about AIDS, and almost two-thirds did not see the need to "use a condom when they sleep with someone for the first time."

This varies from school to school, and has important implications for our understanding of gambling behaviour. (These are explored in more detail in section two).

STATEMENT	Yes	No
People must use a condom with everyone they sleep with	91.5%	8.5%
People must use a condom when they sleep with someone for the first time	35.5%	64.5%
People should enjoy life and stop worrying about HIV/AIDS	17.6%	82.4%

Table 29: Attitudes to risk-taking behaviour

At a regional level, students in KwaZulu-Natal and Limpopo were the most willing to take risks.

1.4.7 Aggregate demographics – life-style

The development of an "alcohol" culture (noted above) was reinforced when learners were questioned about their life-style. In this case, the use of alcohol "in moderation" is widely accepted as a social convention although a small majority of students (54.6 %) appear to be opposed to its use in general. Fairly strong inhibitions against alcohol usage were found in some schools, most notable in all-girl institutions and in the religion-based schools in the sample. On the other hand, group discussions with students in some of the independent schools suggested a greater acceptance of alcohol consumption and pointed to a definite linkage between this and other risk-related behavioural activities.

These activities include the use or marijuana. Overall, about one in ten learners either use dagga or have no particular objections to others doing so. This attitude was widespread across the range of schools, but was far more evident in some of the historically white and urban private schools. We suspect from our qualitative interviews that narcotics use of this type is also far more frequent than is suggested by the statistical data, for the most part, because of respondents' fear of disclosing information that might be passed onto teachers or parents. In some schools however this is probably unfounded since there are teachers who make frequent use of alcohol and dagga along with gambling as a recreational activity. There appears to be some evidence of the triad of activities in the predominantly African schools in the rural areas of KwaZulu-Natal and the North-West in particular.

Relatively casual attitudes to sexuality lie somewhere between alcohol and marijuana usage. This varies very substantially from single-sex female schools on the one hand, to some of the independent schools on the other. In some of the more elite schools we found pre-dispositions to casual sex to be far more widespread than in schools that made up the sample in the less "developed" areas.

STATEMENT	True	False
Alcohol in moderation is OK	38.7%	54.6%
Dagga in moderation is OK	11.1%	78.3%
Sex with my friends is OK	17.7%	72.4%

Table 30: Attitudes to alcohol, drugs and sex

1.5 Gaming Orientations

1.5.1 Aggregate demographics - experience

Slightly less than half the sample (45.9 %) have had some prior experience or exposure to gambling in one modality or another. Both qualitative and quantitative evidence (discussed in more detail below) suggested that this largely, but not exclusively, arose out of participation in the National Lottery.

Qualitative data suggests that these initial experiences vary very substantially from school to school and are shaped by both class and cultural influences. In the rural areas for example, first experiences with gambling appear to involve relatively low-tech forms of gambling, often sanctioned by tradition and community experience. Many teaching staff (and learners) in these target schools had difficulty in identifying fully with the view that flipping coins or throwing dice were forms of gambling. These activities were viewed as sheer "entertainment". Mainstream gambling was most often confused with wagering on horses or participation in casino activity. For this reason, reported levels of prior gambling experience may be far higher than the study suggested.

First (or prior) experiences with gambling also reflect patterns of cultural diffusion into the rural areas. As our interviews revealed, the more "primitive" forms of gambling have been supplemented progressively by increasingly periodic movements between the urban and rural settings, as well as spill over value change brought about by the extension of the mass market and the global communications revolution. Many of the more conservative and older teachers in the rural schools are concerned about an erosion of values prompted by mobile phones and the Internet – both of which appear to be offering the learners exposure to more "developed" and sophisticated modes of gambling. Many learners, in fact, confirm that their first interest in gambling was motivated by these media.

Prior experience in gambling is very different in the urban areas, particularly among learners in the private school sector. In these schools – as well as a number of target public schools – exposure to gambling behaviour is invariably high-tech. When

asked to define the nature of their "prior" gambling experience, most adolescents in these categories tend to focus on such points of reference as the world-wide web, slot machines, shopping mall arcades and casinos.

PRIOR GAMBLING EXPERIENCE	
Yes	45.9% (N = 1762)
No	54.1 % (N = 2075)

Table 31: Student gambling profile – prior experience (including the National Lottery and casinos)

1.5.2 Aggregate demographics - attitudes

Actual participation in recreational gambling is fairly limited. (See Above). There is, nonetheless, a very high tolerance for gambling behaviour among the learners in our sample – far higher, in fact, than for either alcohol use, drug usage or casual sexual relations.

In a manner clearly indicative of a fairly well establishing culture of gambling, three-quarters of the sample (76.0%) have no particular objections to gambling activity as a matter of principle – other than it being constrained by certain (undefined) "limits". 36.3% of all respondents, just less than half of this group of learners, had an unrestricted view of gambling – and it is reasonable to presume that the 18.6% who display a pre-disposition to gambling (roughly one-in-five students – see above) falls into this category.

Only one-in-eight students (12.7%) believe that gambling should be banned.

STATEMENT	
Gambling is O.K. within certain limits	39.7%
I don't like gambling but others can if they want	24.0%
Gambling is O.K. in general	23.6%
Gambling should be banned	12.7%

Table 32: Students' attitudes to gambling

1.5.3 Aggregate demographics – non-participation

An emergent culture of gambling among approximately one-quarter of learners is indicated from questions on non-participation.

The figure of those respondents who are averse to gambling as a mixture of preference and principle is relatively lower than the aversion to recreational gambling displayed when learners were questioned for the first time. (See above).

25.4% of learners are however opposed to gambling for purely instrumental reasons, i.e. they lack geographic and/or financial access. Implicit in this response is the view that were money and facilities available the net predisposition to gambling could conceivably rise from one-in-five to one-in-four..

From learner perspectives, parental opposition to gambling is interestingly insignificant.

STATEMENT	
Because I don't like to gamble	70.5%
I have no access to gambling facilities	17.3%
I have no spare money	8.1%
My friends or parents would not like it	4.1%

Table 33: Reasons for not gambling

1.5.4. Aggregate demographics: probabilities

Respondents were questioned on their understanding of the intrinsic probabilities in gambling behaviour and with regard to wider issues of capability in a gambling environment.

The majority rejected some of the key conventional wisdoms, but there were significant minorities who identified with some of the mathematical myths that shape gambling behaviour world-wide. A quarter of the learners (25.5%) believe that mathematical knowledge is important in achieving success in the national lottery. Over a third of learners (36.6%) are of the opinion that repeat playing on the same machine supports "beating the system" at slots.

STATEMENT	YES	NO
Knowledge of maths can help you win at the lotteries	25.5%	74.5%
Staying at the same slot machine improved your chances of winning	36.6%	63.4%
It would be foolish to bet on the number 18 if 18 had come up recently	32.4%	67.6%

Table 34: Beating the odds: understanding of gambling odds and probability

1.5.5 Aggregate demographics: modalities

Many modalities of gambling have been used by the approximately half of the sample that have had experience of gambling in its multiple forms. In conformity with previous data, youth gambling is particularly predominant in the national lottery which is, in turn, an important means to stimulate the dissemination and conventionalising of an ethic of gambling: 46.2% of learners have at some point bought a Lotto ticket and 9.2.% appear to do so on a regular basis.

Sports betting, scratch cards and coin flipping for money constitute a second tier for preferred modes of gambling. High technology gambling – on the Internet or cell-phones – is relatively less frequent, partially because of access problems and partially because most learners are unacquainted (as yet) with these leading edge modalities.

Participation in horse racing is fairly infrequent, but casino attendance appears to be relatively high. 12.6% of learners claim to have been into casinos to gamble (i.e. one-in-eight) or to have engaged in some sort of activity that has enabled them to penetrate the existing physical and legal barriers. (It is worth remembering, that some of these children were over the age of 18 when the survey took place.)

The study was designed to track gambling behaviour over time i.e. over the preceding 12 months of the survey. In most modalities the indicators are relatively stable, suggesting no particular increase in incidence. Three indicators have however changed quite dramatically.

Firstly, it appears that the proportion of adolescents gambling on the National Lottery is increasing quite substantially. We found no particular reason for this in our interviews, but teaching staff variously attributes this to the increase in the number of draws per month, as well as a broader intensification of lottery betting as a matter of life-style. Learners tend to confirm these trends with an increasing proportion inclined to view lottery participation as a natural facet of weekly existence. A growing number, it seems, have difficulty in associating the lottery with "real gambling".

Of possibly deeper significance are increases in fight-betting and casino participation. We suspect that indicators on the former are probably too low to begin with, largely because teachers regard this type of wagering as especially obnoxious and worthy of punishment. Nonetheless, fight-betting and related "games" of physical violence do occur, often in pre-designated and isolated portions of school-grounds as well as an extra-mural form of recreational/gaming activity. This sometimes forms part of initiation procedures or rites of passage among adolescent males. We also found what we hope are isolated cases of teaching staff participating in these activities as a form of gaming.

Casino participation also appears to be on the rise – particularly where casinos are fairly near to schools or readily accessible. This seems to be a universal phenomenon with the exception of learners in schools in the very distant rural areas. Even here, we found evidence of "consortiums" of students who collect money to be taken into casinos by older-looking learners or, in some cases, by teaching staff who gamble on their behalf. In the North-West, for example, local taxi-drivers and casino staff are alleged to be part of these consortia whose purpose is to assist entry by older adolescents. Qualitative interviews with teachers and learners suggest similar situations to be especially on the increase in the in the Lowveld (Mpumalanga), in the Vaal Triangle as well as schools with ready access to the casino network around Johannesburg.

There is a tendency for this type of behaviour to increase exponentially under conditions of structural economic inequality. Involvement in the glitter of high tech-gambling is clearly associated with success and upward social mobility, particularly (but not entirely) by learners in historically disadvantaged schools. Principals in these schools deplored the magnetic attractions of the gaming industry, for their staff, parents and, not least learners. Most teachers throughout the country see the industry as a major source of national and personal under-development. Many learners, on their part, increasingly see the casino as an emblematic counterweight to poverty and the prospect of limited life opportunities.

GAMBLING ACTIVITY	In your whole life				Last 12 months only	
	Never	Occasionally	Monthly	Weekly	Not in the last 12 months	Monthly
Flipped or spun coins for money	68.8%	25.2%	2.5%	3.5%	66.3%	2.6%
Bet on a sports game	66.6%	23.7%	4.8%	5.0%	69.5%	5.0%
Bet on a horse race	93.5%	4.2%	1.1%	1.3%	91.2%	1.6%
Bet on a fight for money	92.4%	5.1%	1.2%	1.2%	73.2%	3.9%
Played games of dice for money	84.4%	11.5%	2.2%	1.9%	83.6%	2.6%
Played the lotto	53.8%	31.2%	5.9%	9.1%	40.2%	8.8%
Played a scratch card	60.3%	30.7%	4.4%	4.5%	62.6%	4.5%
Gambled at a casino	87.4%	8.6%	2.6%	1.4%	61.2%	6.8%
Played cards for money	75.6%	18.3%	3.4%	2.7%	75.8%	3.8%
Played a game on the internet for money	92.4%	4.8%	1.5%	1.4%	85.6%	2.7%
Played for money on a cell phone	88.6%	7.4%	2.0%	2.0%	87.8%	2.4%
Bet on a game of skill	81.1%	13.3%	3.1%	2.5%	82.5%	3.7%

Table 35: Frequency and nature of gambling activities

1.5.6 Aggregate demographics - expenditure

Most expenditure on gambling fell into the less than R5 range. Over three-quarters of the respondents who have gambled (77.6%) fall into this category, with a further 9.9 % in the R6 to R20 range. A small proportion that gamble (5.3%) have sometimes spent in excess of R100.

AMOUNT GAMBLED	
R1 to R5	77.6%
R6 to R20	9.9%
R21 to R50	4.3%
R51 to R100	2.9%
R101 to R200	2.3%
R200 or more	3.0%

Table 36: Largest amount ever gambled

1.5.7 Aggregate demographics - pathology

The project did not lend itself to case-by-case interviews of learners who displayed strong pre-dispositions to gamble, least of all the substantially greater number who display mild/potential symptoms suggestive of a gambling problem. Nonetheless, we posed a universally-used battery of questions to identify gambling pathologies to both groups in turn.

As anticipated, the indications on the 13.5% of learners who were mildly-disposed gamblers were very much lower than the 5.1.% with a strong disposition. Among the latter however, strong indications of pathology emerged.

Occasional gambling, in the first instance, excludes "chasing" i.e. repeat gambling with the purpose of eliminating losses. Yet, only 2.6% of the 5.1% of learners strongly pre-disposed to gambling – a miniscule proportion – appear to learn the lessons of loss and desist from further gambling

This incidence is confirmed further through a series of key questions on the dynamics of gambling normally posed to examine degrees along the spectrum from "normality" to addiction. Over 80% *of the sub-set of students who are "strongly disposed" to*

gambling admit readily to having reneged on gambling debts or having "bunked" school because of gambling activity. An alarming 88.5% of this group admit openly to having stolen money to service gambling debts in a manner that clearly typifies the widely recognised relationship between adolescent gambling, and minor criminality.

Over 70% of the same category of learners confirm universally recognised links between adolescent gambling and delinquent behaviour. Responses about gambling habits suggest that a significant proportion of learners who gamble frequently are personally dishonest about this form of recreational activity. Gambling behaviour as an aspect of familial and peer conflict is strongly in evidence – largely, one suspects, because of parental or peer criticism. The obsessive potential of gambling activity is typified in the 70.2% of the sample of learners who "like gambling a lot" but now "cannot stop".

Somewhat lower but nevertheless significant indications of guilt and the compulsive character of gambling in some circumstances can be inferred. Many learners who fall into the "like a lot" category clearly experience breakdown of personal planning or self-control that no doubt induces a variety of ethical confusions. As the universal literature indicates these facets of disordered personality lie at the foundations of a variety of socio-psychological problems.

RETURNED	
Some of the time	48.7%
Most of the time	36.9%
Every time	11.8%
Never	2.6%

Table 37: Students return to try and win their money back

STATEMENT	YES	NO
When you were betting, have you ever told others you were winning money when you really weren't	76.1%	23.9%
Has your betting caused problems for you such as arguments with friends or family	76.2%	23.8%
Have you ever gambled more than you planned	64.7%	35.3%
Has anyone criticised your betting or told you that you have a gambling problem	79.8%	20.2%
Have you ever felt bad about the amount that you bet or about what happens when you bet	62.4%	37.6%
Have you ever felt that you would like to stop betting money but didn't think you could	70.2%	29.8%
Have you had arguments with your friends and family because of the money you spent on gambling	79.6%	20.4%
Have you borrowed money to bet and not paid it back	83.5%	16.5%
Have you ever skipped or been absent from school or work due to betting activities	85.6%	14.4%
Have you borrowed money or stolen something in order to bet or to cover gambling debts	88.5%	11.5%

Table 38: Reasons for repeat gambling

Qualitative information on these issues is limited by the anonymity of adolescent gamblers. Nonetheless, a number of principals and teaching staff anxious at evident gambling in some of the target schools have reported similar findings to those reported above. Parents (infrequently) list gambling among more general social concerns about their children in discussions with senior staff, guidance of life-skills teachers, while (a small proportion) of school psychologists working with the education authorities have been alert to these issues. Petty crime and absence from school because of gambling is also reported by a number of principals, but our impression is that, in most cases, teaching staff have not fully appreciated the dimensions of the problem. As we have indicated, in many cases parents and teachers are inclined to write off gambling as a minor issue, one among multiple indiscretions rather than a stand-out form of deviant behaviour

1.5.8 Aggregate demographics - motivation

Motivation to gamble is highly complex and ranges from minimal risk calculations in pursuit of recreation to high-risk activities associated with compulsive personality. These psychological propellants are, in turn, driven by a range of equally complex individual and collective social experience.

Within the framework of these considerations, a number of factors drive gambling by learners in our education system. Peer pressure does not constitute a significant drive among the sub-set of the sample with a "strong predisposition" to gamble.

Approximately a fifth of this group are driven by financial motives, but an even larger percentage sees gambling as an "exciting" activity. This conforms to the international literature, which sees gambling as an artificial empowerment activity linked to identifiable personality types. While a significant number of learners clearly see money as the object of gambling, as many (if not more) also refer to the characteristic "rush" of gambling and their personal elation in "beating the system". This, no doubt, informs the 35,4 % Table of learners who, quite simply (and quite dangerously habitually or "always gamble".

REASONS	
Because I always gamble	35.4%
Because its exciting	23.8%
To make more money	20.2%
To pay people whom I owe money	10.7%
Because my friends do it	9.9%

Table 39: Reasons for gambling

1.5.9 Aggregate demographics – winnings utilisation

Respondents who displayed a strong propensity to gamble were questioned on the use of their winnings. Unsurprisingly, very few invested their savings. Most used their winnings for short-term consumption, including the purchase of luxury items and recreation. Considerably more disturbing are the 29.1 % whose winnings reinforced gambling habits, and the 14.1 who deploy their winning to service gambling debts and obligations.

EXPENDITURE	
Buy luxury items (cell phone, fancy clothes, pizza etc)	29.7%
More gambling	29.1%
Entertainment (movies, sports etc)	14.6%
Pay back the money I owe other people	14.1%
Buy necessities (groceries, school clothes etc)	6.3%
Save the money	6.2%

Table 40: Use of gambling winnings

1.5.10 Financial sourcing

Parents and friends are the main source of finance for learners who "like to gamble very much". Dispositions to gamble are fuelled largely by these twin-funding streams, supplemented (or displaced) by moneylenders in the case of most "township" schools in the sample. Of particular concern is the not insignificant proportion of learners who admit to resorting to crime in order to generate funds to support and maintain their gambling habits.

SOURCE	
Parents	30.4%
Friends	20.6%
Money lender (Mashonisa)	18.4%
Stole the money	9.9%
Brothers or sisters	9.7%
Sold things to get money	7.8%
Other relatives (aunt, uncle etc)	3.2%

Table 41: Source of money for gambling

Section Two: A Dynamic Profile Of Youth Gamblers

Earlier the report noted that just under half (45.9%) of our respondents have engaged in some form of gambling activity. Whilst this is not in-itself alarming, especially given the wide range of gaming activities surveyed, what is worrying is the fact that 5.1% of those surveyed expressed a strong-predisposition towards gambling activity, whilst a further 13.5% indicated a mild or soft-predisposition towards gambling activity.

This is very much in line with international trends. In this section, the report will break down this sub-set of students – the fifth of the sample with a predisposition of sorts towards regular gambling – and examine trends that might help explain:

- What the average profile of a problem gambler (the 5.1%) is,
- How gambling activity correlates with attitudes to life and risk,
- How gambling activities correlate with family background and socio-economic circumstances,
- How gambling activity correlates with experiences of physical abuse, parental alcohol abuse, and parental gambling patterns,
- How gambling correlates with life experiences and perceptions of selfhood, and
- What distinguishes the strong-disposition (5.1%) category from the soft-disposition (13.5%) category of gambler?

In order to understand the underlying forces driving these trends, it is important to remember that gambling activities must be understood within the context of wider social attitudes. Included within this are attitudes to risk taking and sexual behaviour, patterns of personal and family abuse, and other core drivers of human social behaviour.

In the first part of the section, the report offers a broad demographic profile of youth gamblers. In the remainder of this section, it examines some of these factors, which constitute vital elements of the behavioural model that underpins gambling behaviour.

2.1 Who gambles, and how much is spent on gambling?

2.1.1 Race and class:

Although all race and class groups displayed a similar interest in gambling, the type of gambling – and, one assumes, the factors underpinning gambling behaviour – varies across different class groups.

One question used to indicate class asked whether respondents had a computer at home. As could be expected, the answers to this varied across traditional racial and class lines, with as few as 5.9% of learners having access in one historically underprivileged school and as high as 100% in a better resourced, traditionally middle-class, Indian school. (It is not possible to present these results in detail, in order to preserve the anonymity of the schools involved.)

Across the board, however, there was a significant correlation (.105)[i] between access to a home computer (our measure of class privilege) and certain types of higher-end gaming activities (placing bets at casino's or playing the lotto).

This is not surprising, and consistent with the qualitative information gathered. Students in poorer areas tended to play dice or other gaming activities which could be organized informally, and which offered significantly lower barriers to entry as well as less parental and other adult oversight. Students in wealthier urban areas were more likely to have access to and opportunity to engage in organized gaming activities, either with their parents consent – we were shocked to discover that parents often assisted their children to enter casino's and allow them to play slot machines – or simply by buying tickets themselves to the National Lottery at local outlets, which seldom if ever asked them their age.

In terms of the amount of money spent on gambling activities, race appears to be the strongest predictor of behaviour. Of the category of students who had spent R200 or more gambling:

- 26.8% came from the Indian community,
- 19.8% came from the white community,
- 18.4% came from the coloured community, and
- 08.5% came from the African community.

(A total of 14.3% of students in this category did not disclose their racial origins.)

Although there is not enough information about the individual students in question to draw strong conclusions, the extremely high number of Indian students in this category is significant.

When we disaggregate the results by school, we find that this trend is reinforced. In all but one of the predominantly Indian schools surveyed, a disproportionate number of respondents claimed to have spent over R200 gambling. In a lower class community with very high rates of unemployment in the Durban area, this amounted to as many as 6.5% of all respondents (the same number as those involved in the most exclusive private school included in the survey). In a middle class Indian school, this rose to an astonishing 10.7% of respondents. (For reasons of confidentiality, the report is not able to provide the names of the schools involved.)

This is an interesting trend. R200 is a lot for anyone to spend in a gambling session. When repeated, this translates into a potential debt which no pupil, least of all learners from under privileged communities, could ever be expected to absorb comfortably. This is an indication of potentially problematic gambling behaviour, especially in the Indian community.

Interestingly enough, although class and race appear to correlate closely with levels of money spent on gambling, there was no significant correlation between class and willingness to lie about winning.

2.1.2 Gender:

On the whole, male students were more likely to engage in gambling and to spend more money doing so than female students. 56.8% of the students who placed a bet in a casino or on the lottery were male, whilst only 36.8% were female, a variance of + 20%. This pattern of male-dominated behaviour is found in all the various categories of gambling considered in the survey.

When we examine other the types of gambling, and focus specifically on the sub-group of students who admit to engaging in these activities on a *weekly* basis, – in other words, those students with a strong predisposition to gambling – we uncover the following gender breakdown.

Type of gaming activity engaged in on a weekly basis	Gender		Variance
	Female	Male	
Flipped or spun coins	44.0% (2.8%)	56.0% (4.5%)	+ 12.0%
Bet on a sports game	34.9% (3.1%)	65.1% (7.4%)	+ 30.2%
Bet on a horse race	29.7% (0.7%)	70.3% (1.9%)	+ 40.6%
Bet on a fight	33.3% (0.8%)	66.7% (1.8%)	+ 33.4%
Played dice games	21.4% (0.7%)	78.6% (3.1%)	+ 57.2%
Played the lotto	40.5% (6.5%)	59.5% (12.3%)	+ 19.0%
Played a scratch card	42.7% (3.4%)	57.3% (5.8%)	+ 14.6%
Casino	35.9% (0.8%)	64.1% (1.8%)	+ 28.2%
Played cards	35.3% (2.4%)	64.7% (3.0%)	+ 29.4%
A game for money on the internet	28.9% (0.7%)	71.1% (2.1%)	+ 42.2%
A game for money on a cell phone	47.7% (1.7%)	52.3% (2.2%)	+ 04.6%
A game of skill	34.7% (1.5%)	65.3% (3.6%)	+ 30.6%

Table 42: Regular gambling activities – profile by gender

Explanation of table:
The Tables cited in the table above reflect the gender breakdown of active (weekly) gamblers. In other words, 44.0% of those students who flip or spin coins for money *on a weekly basis* are women. 56.0% are men. The Tables cited in parenthesis provide an indication of the proportion of the total female and male population involved in active (weekly) gaming in each category. In other words, 2.8% of all female respondents flip or spin coins for money *on a weekly basis*. 4.5% of all male flip or spin coins for money *on a weekly basis*.

Whilst male students are the dominant gamblers in all race groups, the extent of this dominance varies considerably. In particular, we find that Indian males (61.8%) are significantly more likely to gamble than Indian females (27.3%) – a variance of + 34%.

Female students were more likely than males to engage in petty and small-scale gambling (less than R20 a session), whilst males were more likely to spend moderate (R21-R100) and high-end (R101 upwards) amounts of money gambling.

Most money ever gambled	Gender	
	Female	Male
R1-R5	48.4%	39.3%
R6-R20	20.1%	19.9%
R21-R50	10.6%	12.4%
R51-100	8.8%	10.7%
R101-R199	2.9%	4.0%
R 200 or more	9.1%	13.7%
Total	100%	100%

Table 43: Expenditure on gambling by gender

In summary: both male and female students are involved in a multitude of different types of gambling activities, and both male and female students fall into the sub-set of gamblers who gamble on a weekly basis and who can be said to have a strong predisposition to gamble. However male students are significantly more likely to gamble on a regular basis, and to spend larger amounts of money doing so. This is especially the case with students from the Indian community.

2.1.3 Provincial gambling profile

Provincial gambling patterns are summarised in the table below. In most cases, there are small but important Provincial variations, which warrant further analysis. It is not clear why, for example, students in Mpumalanga and the North West are three times more likely to gamble than the national average.

It is worth noting that, although only a small minority of students claimed to gamble at casinos *on a weekly basis* (1.4% of the sample), this rose in KwaZulu Natal (to 2.2%) and the North West Province (2.6%). Of these, almost a third of the students were 18 years or old, and were thus legally entitled to gamble.

It must also be remembered that these are, ultimately, just a reflection of student claims and perceptions, which cannot easily be verified. *The survey, in short, does not reflect a widespread or uncontrolled presence of underage children in casinos.*

Gaming activity	W. Cape	E. Cape	N. Cape	KZN	Gauteng	Limpopo	Mpuma-langa	North West	Free State	National Average
Flipped or spun coins	1.6%	2.4%	5.6%	2.7%	3.8%	2.3%	10.5%	9.7%	2.9%	3.5%
Bet on a sports game	3.5%	4.8%		3.5%	3.5%	0.6%	10.4%	11.5%	11.1%	5.0%
Bet on a horse race	0.7%	2.2%	0.7%	2.8%	0.3%		0.6%	2.0%	0.7%	1.3%
Bet on a fight	0.8%	0.4%	0.7%	1.8%	0.9%	1.1%	1.7%	3.0%	2.0%	1.2%
Played dice games	0.3%	1.1%	1.0%	1.0%	4.2%	1.1%	3.4%	3.3%	1.6%	1.9%
Played the lotto	6.4%	8.5%	15.6%	9.1%	8.5%	2.5%	12.3%	14.9%	9.9%	9.1%
Played a scratch card	2.9%	4.9%	2.9%	4.7%	2.7%	2.2%	9.6%	8.7%	5.3%	4.5%
Casino	0.3%	1.4%	1.4%	2.2%	1.4%	0.6%	0.9%	2.6%	1.6%	1.4%
Played cards	2.1%	2.6%	3.1%	3.2%	2.4%	1.1%	4.5%	2.8%	3.3%	2.7%
Internet game for money	0.6%	2.0%	2.1%	1.7%	1.3%	1.1%	0.5%	1.6%	1.7%	1.4%
Cell phone game for money	1.9%	3.0%	2.8%	2.2%	1.4%	0.6%	0.5%	3.7%	2.3%	2.0%
A game of skill	1.0%	1.8%	2.9%	3.1%	2.4%	2.8%	3.1%	4.8%	3.2%	2.5%

Table 44: Types of gambling – Provincial breakdown

2.2 Narcissistic and risk-taking behaviour

In order to measure respondents' willingness to take risks, three questions relating to analogous risk-taking behaviour were asked, each of which dealt with attitudes towards sexuality in light of the HIV/AIDS pandemic. The intention was to see if there were any discernable patterns. Were students who were willing to take life-threatening risks in their private, sexual, life more or less likely to fall into the category of problem gamblers?

Whilst we found only a minor correlation between our question used to indicate class and the statement, "People must use a condom with everyone they sleep with"; we found strong negative correlations between class and the other two measures of risk taking behaviour used.

In the first, respondents were asked whether "people must use a condom when they sleep with someone for the first time". This question serves as a measure of high risk-taking propensity. It was thus alarming to find a negative correlation of -.146,[ii] suggesting that poorer respondents were more and wealthier respondents less likely to take such risks.

In the second, respondents were asked whether "people should enjoy life and stop worrying about HIV and AIDS". This question serves both as a measure of risk taking propensity and an indication of indulgent, narcissistic, behavioural tendencies. It was alarming to find a negative correlation of -.110,[iii] suggesting that students willing to take risks in the pursuit of immediate sexual gratification would had a higher predisposition to gamble than those who did not.

This is troubling, and points directly to some of the socio-cultural beliefs driving gambling behaviour. When we examine the answers given to these questions, we find that a majority of students understand and appreciate the risks of HIV/AIDS.

When we consider the results by race, we find that 80.2% of African students; 78.9% of coloured students; 88.7% of Indian students; and 90.7% of white students disagreed with the statement above used to measure risk taking and fatalistic-narcissistic behaviour.

	RACE			
	African	Coloured	Indian	White
Yes	19.8%	21.1%	11.3%	9.3%
No	80.2%	78.9%	88.7%	90.7%

Table 45: Racial responses to the question: People should stop worrying about HIV-AIDS and enjoy life"

When we consider the results by gender, we find that 85.8% of female students and 79.3% of male students disagreed with the statement above.

However, when we consider the relationship between the amount of money spent on gambling, and fatalistic-narcissistic behaviour, we find that whereas less than a quarter (24.4%) of the students who believed that people "should enjoy life and stop worrying about HIV and AIDS" spent a maximum of R1 to R 5 when they gambled; just over a third (35.2%) of the students who believed that people "should enjoy life and stop worrying about HIV and AIDS" spent R200 or more when they gambled.

	Most money every gambled					
	R1-R5	R6-R20	R21-R50	R51-R100	R101-R200	>R200
YES	24.4%	18.4%	17.0%	24.7%	24.1%	35.2%
NO	75.6%	81.6%	83.0%	75.3%	75.9%	64.8%

Table 46: Gambling spend-based responses to the question: People should stop worrying about HIV-AIDS and enjoy life"

This represents an increase of 10.8%, which confirms clearly the correlation observed between a general propensity towards risk taking behaviour and a willingness to gamble on a regular basis spending higher amounts of money.

2.3 Calculating risk and "beating the odds"

Gaming involves calculated risk. International and local studies all point to the fact that habitual gamblers are more likely to believe that they can "beat the odds" than casual gamblers. In other words, they believe that some special insight can tilt the odds of wining in their favour, which justifies the risk inherent in gambling.

To measure this, three questions were asked, the results of which are summarised in the table below.

In all cases, a significant number of respondents answered in the affirmative. In other words, between a quarter and a third of our respondents claimed that, with some special insight, they could "beat the odds".

	TRUE – As a percentage of all respondents	TRUE – A s a percentage of respondents with a computer at home	Variance
"Knowledge of math can help you to win at lotteries"	25.5%	20.7%	- 4.8%
"Staying at the same slot machines improves your chances of winning"	36.6%	35.0%	- 1.6%
"It would be foolish to bet on the number 18 if 18 had come up recently"	32.4%	33.8%	+ 1.8%

Table 47: Calculating risk and gambling – profile by class

When we break this down by class or likely household income, we find a slight but inconclusive correlation. Respondents with home computers were slightly less likely to believe that a knowledge of maths or the persistent use of the same slot machine increased their chances of winning, but were also slightly more likely to avoid placing their trust in a recent winning number.

However, when we consider the relationship between these attitudes and the amount of money spent gambling, a more alarming pattern emerges. Clearly, respondents who feel that they have some special insight are willing to spend more money seeking to beat the odds.

	Spend R1-R5	Spend >R200	Variance
"Knowledge of math can help you to win at lotteries"	39.5%	24.1%	+ 15.4%
"Staying at the same slot machines improves your chances of winning"	53.7%	34.2%	+ 19.5%
"It would be foolish to bet on the number 18 if 18 had come up recently"	41.6%	32.1%	+ 09.5%

Table 48: Calculating risk and gambling – profile by gambling-spend

2.4 The family background of youth gamblers

Finally, we need to consider the background of the respondents in our survey. International evidence often (but not always) points to a relatively strong correlation between high-risk or hard-core gamblers and certain behavioural traits, including:

- Nature of family or household structure
- Patterns of domestic and familial abuse
- Exposure to drugs and alcohol at home or school
- Exposure to gambling at home or school

2.4.1 Family structure

A number of questions relating to these traits were included in the survey. Although these do not provide any conclusive evidence, they are worth summarising briefly.

In terms of the family or household structure, we found that over half our respondents (54.9%) lived with both parents, and around a quarter (26.4%) lived with their biological mothers (26.4%). This was roughly the same for both male and female respondents.

Around a third (34.4%) of our respondents felt that they could talk to both parents about their problems, whilst 38.6% felt more comfortable talking to just their mothers. Male respondents were more likely to talk to both parents (43.0%) than female respondents (28.0%), whilst female respondents were more likely to speak just to their mothers (47.9%) than male respondents (29.2%). Roughly similar numbers of male (18.8%) and female (19.0%) respondents did not feel able to speak to any of their parents.

When we consider the relationship between these patterns and the amount of money spent on gambling, we find that of those respondents living with both parents, 7.5% have spend a maximum of between R1 and R5 when they gamble, whilst 3.3% spend R200 or more.

The single biggest problem area can be found amongst respondents who claim not to live with any adults. Within this subset, we find that the number of students willing to spend R200 or more rises to 17.5%.

2.4.2 Domestic or familial abuse

To test this, respondents were asked whether they had ever been assaulted seriously by a parent or by a teacher. (This was defined as being "hit so hard or so often that you had marks or were afraid of" the parent or teacher.)

Unfortunately, as discussed in some detail able, the results bear out popular notions of the violent, patriarchal, character of South African society. In total, almost a fifth (18.9%) had been assaulted seriously by a parent, whilst a teacher had assaulted 17.2% seriously. Female were more likely to be assaulted by their parents (20.6%) and less likely to be assaulted by their teachers (13.2%). African (22.0%) and coloured (24.2%) children were more likely to be assaulted seriously by their parents than Indian (10.3%) and white (10.9%) children. Similarly, African (22.7%) and coloured (17.8%) children were more likely to be assaulted seriously by their teachers than Indian (11.2%) and white (6.9%) children.

This translates into a small but significant difference in gambling behaviour. Just over a fifth (21.5%) of those who spend a maximum of R1-R5 on gambling claim to have been assaulted seriously by a parent at home, as compared to just over a quarter (26.6%) of those who gambled R200 or more: a difference of 5.1%.

Even more significantly, we find that 29.5% of the respondents who claimed to have been assaulted seriously by their teachers spent a maximum of R1-R5 on gambling, this rises to 37.8% when we consider the sub-set of students who spend R200 or more when gambling: a difference of 8.3%.

In other words, students who are assaulted by parents and by teachers are significantly more likely to spend vast amounts of money when gambling than students who are not.

2.4.3 Exposure to alcohol abuse

A high number of the students surveyed were exposed to significant alcohol consumption at home.

In our sample, we found that, on average, 7.7% of all respondents believed that their mothers drunk to much at home. This can be disaggregated into sub-sets of 8.0% (of African children), 9.5% (of coloured children), 5.8% (of Indian children) and 4.9% (of white children).

A much higher number of students (20.6%) believed that their fathers drunk to much at home. This too can be disaggregated on racial lines: African children (24.3%), coloured children (23.1%), Indian children (15.0%) and white children (13.8%).

A further 8.4% of all students believed that their older sisters, and 21.1% believed that their older brothers, drunk to much at home.

These are astonishing statistics, and, again, point to the high levels of abusive behaviour characteristic of South African society. Sadly, these point also to some of the major forces driving compulsive gambling behaviour.

There is a strong correlation between exposure to alcohol abuse and the amount of money spent on gambling. Thus, whereas only 9.0% of the sub-set of students who spend a maximum of R1-R5 gambling were exposed to a mother who drinks too much, this rises to 32.1% of this group spending between R101 and R199, and 14.5% of those who spend R200 or more: a variance of + 23.1% and + 5.5% respectively.

Similarly, we find that students exposed to an older sister who drinks too much tend to spend more on gambling. As opposed to the 10.4% of the sub-set of students who spend a maximum of R1-R5 gambling and who were exposed to an older sister who drinks too much, an astonishing 44.4% of this group spend a maximum of R101-R199 and 14.6% spend R200 and over n gambling: a variance of +30% and 4.2% respectively.

An older brother who drinks too much is equally likely to increase the propensity of students to spend more money on gambling, raising the corresponding gambling-spend from 23.6% (R1-R5) to 47.1% (R101-R199) and 34.7% (R200 and over): a variance of +23.5% and +11.1% respectively.

Curiously, this trend is reversed in the case of fathers who drink too much. Here we find that 28.1% of respondents believed that their fathers drunk too much and spent a maximum of R1-R5 gambling. This dropped to R20.8% amongst respondents spending R101-R199 and 21.0% among respondents spending R200 or more: a variance of -7.3% and -0.2% respectively.

In the main, these results confirm a general tendency observed in the literature whereby exposure to alcohol abuse reinforces and underlies negative gambling habits. This is commonly regarded as poly-addictive gambling behaviour.

2.4.4 Exposure to gambling at home

Youth gambling starts somewhere, and our survey suggests the patronage of adult family members goes a long way towards uncovering this origin.

In this regard, we found that a high-%age of respondents believed that the older adult who looked after them "gambled too much". The results can be summarised thus:

- 9.2% of our respondents believed that their mothers gambled too much,
- 15.8% believed that their fathers gambled too much,
- 11.2% believed that their older sisters gambled too much, and
- 12.8% believed that their older bothers gambled too much.

Whilst these perceptions are relatively constant across gender lines, they are significantly higher in the case of the African children.

In all cases, we find a very strong correlation between gambling-spend and exposure to gambling at home.

When we consider students who spend a maximum of R1-R5 gambling, we find that around an eighth (13.5%) claim that their mother gambles too much. This rises to over a third (38.5%) in the category spending R101-R200 and a fifth (21.6%) in the category spending R200 or more: a variance of +25% and +8.1% respectively.

Amongst students who spend a maximum of R1-R5 gambling, we find that around a fifth (21.4%) believe that their fathers gamble too much, a Table that rises to half (50%) in the category that spends R101-R199 and a third (33.9%) amongst those spending R200 or more: a variance of +28.6% and +12.5% respectively.

Older sisters and brothers were equally likely to promote higher gambling-spend. In the case of older sisters, this promoted an increase from 12.2% (R1-R5 category) to 30.8% (R101-R199) and 17.9% (R200 and over): a variance of +18.6% and +5.7% respectively.

This is perhaps the strongest correlation of all. Families with a history of gambling pass this down and across generations.

In summary: People with a high disposition to gamble in South Africa are likely to come from homes and schools where they suffer considerable physical abuse, and are exposed to adults who drink and gamble excessively.

2.5 Poly-addictive behaviour

Research into youth gambling has long since recognised that problematic gambling is inter-connected with a variety of polyaddictions, including alcohol and drug abuse, eating disorders and so forth. (Ladoucer, Duve and Bujold, 1994) While we did not test for gambling addiction *per se*, we nonetheless found evidence of common pathologies linking different forms of addictive behaviour. (Winters and Anderson, 2000) Principals in the target schools, for example, indicated that known gamblers were frequently beset by other problems, including alcohol consumption, the use of narcotics and sexual promiscuity associated with the spread of HIV/AIDS.

Simply put, this means that there is a mutually reinforcing (and destructive) relationship between different types of addiction. Typically, this means that persons with a strong disposition to gambling are often likely to have an equally strong propensity to drink too much and take drugs.

We encountered widespread evidence of physical abuse, either in the school or in the family environment. These learners are, it appears, far more likely to likely to gamble, particularly in cases that involve low self-esteem. Teaching staff also note increased tobacco consumption among adolescents who need to "relax" and maintain equilibrium, under the stress of gaming – especially games of dice and cards. Problems of this inter-connected nature appear to be especially evident in Western Cape schools among so-called "coloured" children who also gravitate towards gang-membership and a number of deviant social behaviours. At the quantitative level we also found a direct correlation between acceptability of gambling, drugs, sex and the consumption of alcohol.

Whilst we found no clear correlation between gambling and drug taking, we found a discerning relationship between students who spent excessive amounts gambling and students who admitted to frequent alcohol consumption.

Most money ever gambled	Last 12 months: How often have you had too much to drink?		
	None	Once or twice	Often
R1-R5	53.0%	33.0%	14.0%
R6-R20	37.9%	51.4%	10.7%
R21-R50	42.4%	35.4%	22.2%
R51-R100	41.0%	28.2%	30.8%
R101-R200	43.3%	30.0%	26.7%
R200 or more	26.3%	22.1%	51.6%

Table 49: Gambling-spend – relationship to alcohol consumption

The significance of these Tables is that they illustrate clearly the tendency for increased alcohol consumption to influence gambling-spend. Whereas over half (53.0%) of those who spend a maximum of R1-R5 claim not to have had too much to drink in the past 12 months, this tapers off to a quarter (26.3%) of those who spend R200 or more.

Similarly, we find that whilst only an eighth (14.0%) of those who spend a maximum of R1-R5 claimed to have too much to drink regularly, this rises to over a half (51.6%) when we examine the sub-set of respondents who spend R200 or more.

Section Three: Key Findings And Strategic Recommendations

3.1 Key findings

The present study confirms earlier studies that allude to:

- Gambling as an important facet of youth behaviour in South Africa, and that –
- Many learners in South African schools have experience of both lower and higher technology modalities of modern gambling.

As noted above –

- 45.9 % of our respondents in Grades 10 to 12 in out 28 target schools nation-wide have engaged in gambling activity of some sort at one time or another.
- 13.5 % of the sample have a disposition towards gambling as one among a suite of recreational activities
- 5.1 % of learners in Grades 10 to 12 have a strong predisposition towards gambling behaviour.
- A significant proportion of the strongly pre-disposed gambling pathologies symptoms when measured across a battery of questions normally used in the identification of problem gambling internationally.

Given the numbers of children in Grades 10 to 12 in the total number of secondary schools in South Africa, this implies – in both basic and global terms – that substantial numbers of learners in the age 15 to 19 category –

- Identify with gambling as a recreational and/or life-style activity;
- Gamble across the range of multiple modalities available to people in the expression of their gambling dispositions:
- Invest a significant proportion of their time and money in various types of gambling, and, in the case of the hard-core gambling learners -
- Internalise (or externalize) addictive) disorders that compromise psychological well being, personal relations, school performance, and ultimately, the public health of the wider community.

3.2 Strategic pathways

In the absence of deeper and more individualised psychological probing that is effectively precluded by the macro-nature of the present study, we are not in position to pinpoint these pathological gamblers as a component part of the school system.

Nonetheless, it is readily evident that public policy, the South African gambling industry, and other key stakeholders are obliged to address what appears to be a hidden and grossly under-estimated social problem that is comparable to the problems of adolescent gambling in other parts of the international community.

This requires action at three inter-related levels:

- Research:
- Capacity-Building:
- Industry and Public Sector Intervention

3.2.1 Research

There is a requirement to bring South Africa into the expanding mainstream of global research into adolescent gambling, bearing in mind that many subtle aspects of our problems reflect the mixture of international and indigenous experience. This complex recipe is central to social dynamics in so-called Third World countries, or, as in the case of South Africa, where recently accelerated transformation runs hand-in-hand with deep pockets of deep under-development. A portion of youth

gambling reflects the impact of the high-technology mass market, which works to homogenize behaviour (and youth gambling behaviour) in such industrialized countries as the United States, Britain, Australia and Canada.

Yet, as out study, indicates, there are important and distinct nuances in our youth behaviour that directly arise from local circumstances describing our historical, cultural, economic and political networks.

We need to bear this local component in research to further verify the identification and prevalence of youth gambling within the complex social environment of which it is a product. This includes the family and parents, peer groups, the school and most of the other major tools of socialisation that determine cultural continuity and ideological production – all of which echo such structural issues in contemporary South Africa such as economic inequality, poverty and youth unemployment.

The signification of gambling – what people understand by the term – and how they gamble is at least as important as who gambles. While the problem of adolescent gambling appears to be grounded in poor rural schools where learners desperately require an illusion of upward mobility, "gambling" does not have the same meanings across the board from elite urban schools to these often grossly under-serviced institutions in the deep rural areas. We need to look at this more carefully in further research, as well as to examine the universally important relationship between technology and the various gambling modalities within the context of a modernizing society. Above all, we need to move beyond the present "snap-shot" intervention to the production of data that is more complex, longitudinal and measurable.

The dynamics of youth gambling need to be understood on a regional basis. Our data suggests that learners in locations such as KwaZulu-Natal, Mpumalanga, parts of the North-West and the urban complex around Johannesburg are especially susceptible to gambling activity at the higher end of the technological scale. This indicates that we now need to disaggregate our findings in the direction where it becomes possible to conduct comparative studies between one province and another.

3.2.2 Capacity-building

At a more concrete level, far more could be done to involve key community stakeholders who influence the emergence, degree and behavioural expression of adolescent gamblers – both in policy-related research and in the process of problem-management. On the basis of our current work, there is a pressing need to counter-educate most educators, parents and the learners away from the conventional wisdom that sees gambling as marginal to other mainstream social issues of youth development, including HIV-AIDS, substance abuse, poor school performance, juvenile crime and delinquency and joblessness. In particular, there needs to be wider and deeper comprehension of the poly-addictive quality of many behavioural disorders among the young – and their intersection with gambling.

As the international experience clearly indicates, (Sproston et al, 2000) this involves the:

- Development of socio-demographic base-line data based on stakeholder participation in the first instance:
- Strategies to promote heightened public awareness of the causes, prevalence, mechanics and social consequences of adolescent gambling thereafter, and then –
- Follow-up interventions to build collaborative capacity among learners, parents, school principles, teachers, life-skills professionals and critical role-players.

South African families need more preventative public education about gambling activity (in addition to treatment programs for problem gamblers). Schools need to develop policies about gambling both on and beyond school property. District and provincial authorities need to develop more school-based programs to deliver education and treatment to learners with potential poly-addictions (including gambling). Ultimately, many of our learners, need to draw on the multiple and creative experience of many global programs designed to promote an educated view of the difference between safe and problem gambling.

School principals have been surprisingly neglected despite their strategic role in the nexus between learners, parents and the wider community. Relative to the incoherent and enormous dimensions of the latter, they represent a mathematically manageable candidate for public awareness and capacity-building projects. On the basis of our experience we have no doubt that they would respond enthusiastically to any direct and surgical intervention to deal with gambling as a facet of enhanced institutional and scholastic performance

There are multiple psychotherapeutic and pharmacological treatment methodologies for youth gamblers that can be deployed in South Africa. (Griffiths, 1996: Hollander 1998: Griffiths and McDonald 1999. Behavioural disorders and addiction of young gamblers already forms part of the outreach program of the National Responsible Gaming Programme (NGRP), supported by the local gaming industry. Based in Cape Town, the NGRP has already done sterling work to promote a youth gambling consciousness in several dozen schools in the Western Cape and Gauteng, (including some of the target schools in this survey). In the light of the national nature of the problem of youth gambling however, this type of intervention clearly needs further facilitation with the Departments of education (as well as other key stakeholders in the provincial authorities) with a view to extended implementation of targeted and relevant prevention models to the other seven regions.

3.2.3 Industry and Public Sector Intervention

The current situation where it appears that many young people routinely circumvent the legal restrictions on gambling service provision is also in need of further policy action that transcends mere marketing with positive benefits whose impact can be measured. (Pitcher, 1999).

Much has already been done at legislative and public relations-level to limit social impacts through the promotion of responsible gaming on both a national and regional basis. It is also not part of our research mandate to develop specific recommendations.

Nevertheless, a broad regulative agenda must certainly involve additional research-based "supply-side" strategies that enhance the developmental input of the industry while simultaneously blending social and shareholder interests.

Experience suggests that this be done on a pro-active basis involving operational systems of knowledge management, monitors and benchmarks amenable to replication. The global response to responsible gambling also clearly indicates that replicable research based on longitudinal data is vital to gambling industries and legislators in keeping pace with rapid changes in adolescent gambling across the range of modalities. (Fisher, 1998: 1999). This is especially important in places such as South Africa where regulation has to reflect a coincidence of technological and political change.

The sustainable management and development of gambling in South Africa may well takes it cue from view of one international authority that there is "little doubt "that gambling amongst youth is an important area in need of further basic and applied research". "It needs", he adds, "a substantial infusion of funding to support empirically-based studies, and the development of responsible social policy. Clinicians and researchers must advocate for stronger legislation and enforcement of laws prohibiting gambling by underage youth. Only a joint effort between the public, industry, legislators, clinicians and researchers will ultimately help resolve this problem".

REFERENCES

Arnett, J. (1994) – "Sensation seeking: A new conceptualisation and a new scale." Personality and Individual Differences , 16 (2) (2)

Australian Institute for Gambling. (1998) - Study of the social and economic impacts of New Zealand casinos. (Online – www.casinocontrol.gov.za)

Breen, R.B. and Zuckerman, M. (1996) – Personality and cognitive determinants of gambling participation and perseverance. Paper presented at the Tenth National Conference on Problem Gambling. Chicago.

Browne, B.R. (1991) – "The selective adoption of the alcoholics anonymous program by gamblers anonymous." Journal of Gambling Studies 7(3).

Browne, B.R. (1994) – "Really not God: Secularisation and pragmatism in Gamblers Anonymous'" Journal of Gambling Studies 10(3).

Collins, P and Barr, G. (2001) – Gambling and Problem Gambling in South Africa; A National Study. Cape Town: National Centre for the Study of Gambling.

Custer, R.L. (1982) "An overview pf compulsive gambling" in P. Carone, S. Yoles, S. Keiffer and L. Krinsky (Eds) – Addictive Disorders Update. New York: Human Sciences Press.

Derevensky, J.L. and Gupta, R. (1996) - Risk-taking and gambling behaviour among adolescents: An empirical examination. Paper presented at the Tenth National Conference on Problem Gambling. Chicago.

Derevensky, J.L. and Gupta, R (1998) – Youth gambling: Prevalence, risk factors, clinical issues and social policy. Paper presented at the Annual Meeting of the Canadian Psychological Association. Edmonton.

Ettorre, E and Miles, S.(2002) – "Young people, drug use and the consumption of health" in S. Henderson and A. Petersen (eds) Consuming Health, Routledge: London.

Fisher, S. (1990) – Juvenile gambling: the pull of the fruit machine. Paper presented at the Eighth International Conference on Risk and Gambling. London.

Fisher, S. (1992) – "Measuring pathological gambling in children: The case of fruit machines in the U.K." Journal of Gambling Studies. 8(3)

Fisher, S. (1993) – "Gambling and pathological gambling in adolescents." Journal of Gambling Studies. 9(3).

Fisher, S (1997) - "The Pull of the Fruit Machine: A Sociological Typology of Young Players", Sociological Review.

Fisher, S. (1998) – Gambling and Problem Gambling Among Young People in England and Wales. Centre for Research into the Social Impact of Gambling, Plymouth.

Fisher, S. (1999) – "A prevalence study of gambling and problem gambling in British adolescents." Addiction Research , 7(6)

Fisher, S. (2000b) – "Developing the DSM-IV criteria to identify adolescent problem gambling in non-clinical populations." Journal of Gambling Studies, 16(2/3)

Govoni, R, Rupcich, N and Frisch, G.R.(1996) –"Gambling behaviour of adolescent gamblers." Journal of Gambling Studies, 12.

Griffiths, M (1995) - "Technological addictions", Clinical Psychology Forum, 76.

Griffiths, M (1996) – "Pathological gambling and treatment", British Journal of Clinical Psychology, 35.

Griffiths, M and H.F. MacDonald (199) – "Counselling in the treatment of pathological gambling: an overview". British Journal of Guidance and Counselling 27(2)

Griffiths, M and Wood, R.T. (2000)– "Risk factors in adolescence: The case of gambling, videogame playing and the internet". Journal of Gambling Studies, 16(2)

Gupta, R and Derevensky, J.L. (1997b) - "Familial and social influences on juvenile gambling." Journal of Gambling Studies, 13.

Gupta, R and Derevensky, J.L. (1998a) - "Adolescent gambling behaviour: A prevalence study and examination of the correlates associated with excessive gambling." Journal of Gambling Studies, 14.

Gupta, R and Derevensky. J.L. (1998b) – "An empirical examination of Jacob's General Theory of Addictions: Do adolescent gamblers fit the theory?" Journal of Gambling Studies, 14.

Harvard Medical School Division on Addictions (2001) – "Health care providers and the problem gambler" The Wager: Weekly Addiction Gambling Education Report, 6(28)

Kusyszyn, I. (1972) – "The gambling addict vs the gambling professional." International Journal of Addictions, 7.

Ladouceur,R, Dube, D and Bujold, A (1994) – "Prevalence of pathological gamblers and related problems among college students in the Quebec metropolitan area", Canadian Journal of Psychiatry, 39.

Lesieur, H. (1994) – "Epidemiological surveys of pathological gambling: Critique and suggestions for modification." Journal of Gambling Studies, 10(4)

Lesieur, H (1998) – "Costs and treatment of pathological gambling:" The Annals of the American Academy of Social Sciences, 556.

Lesieur, H and Blume, S.B. (1987) – "The South Oaks gambling screen (SOGS): A new instrument for the identification of problem gamblers." American Journal of Psychiatry, 144.

Lesieur, H and Blume, S.B. (1993) – "Revising the South Oaks Gambling Screen in different settings". Journal of Gambling Studies. 9(3)

Lesieur, H and Klein, R. (1987) – "Pathological gambling among high school students," Addictive Behaviours, 12.

Lesieur, H. and Rosenthal, R.J. (1991) – "Pathological gambling: A review of the literature." Journal of Gambling Studies, 7(1)

Ligthelm, A.A. (1999) – The economic impact of the casino industry in the Mpumalanga Province of South Africa. White River: Mpumalanga Gaming Board.

Ligthelm, A.A. (2001) – An examination of community attitudes towards and the visiting profiles of casinos in the Mpumalanga Province of South Africa. White River. Mpumalanga Gaming Board.

Marget, N, Gupta R and Derevensky, J.L. (1999) – The psychosocial factors underlying adolescent problem gambling. Poster presented at the Annual Meeting of the American Psychological Association, Boston.

Miles, S (2002) – "Young people and the appropriation of cultural space" in T. Hall and M. Miles (Eds), Urban Futures. Routledge: London.

Miles, S (2002) – "Victims of risk? Young people and the construction of lifestyles" in M. Cieslik and G. Pollock (Eds), Young People in a Risk Society: The Restructuring of Youth Identities and Transitions in Late Modernity. Ashgate, Aldershot.

Moore, S and Ohtsuka, K (1999) – "Beliefs about control over gambling among young people and their relation to problem gambling", Psychology of Addictive Behaviours 13(4)

National Gambling Board of South Africa (2002) - Annual Report, 2002.

National Gambling Board of South Africa (2003) – Economic Impact of Legalised Gambling in South Africa.

National Gambling Impact Study Commission. (1999). National Gambling Impact Study Commission: Final Report, June, Washington. D.C.

National Opinion Research Centre (NORC). (1999) - Gambling Impact and Behaviour Study. Chicago: University of Chicago.

National Research Council (NRC) (1999) – Pathological Gambling: A Critical Review. Washington, D.C. National Academy Press.

Pitcher, A (1999) –"Responsible promotion of gaming and dealing with problem gamblers". Journal of Gambling Studies 15(2)

Pollitzer, R.M. Yesalis, C.E. et al. (1992) – "The epidemiologic model and the risks of legalised gambling: Where are we headed?" Health Issues 16(2)

Public Inquiry. (1999). Australia's Gambling Industry (Online – http:// www.pc.gov.za)

Shaffer, H.J.and Hall, N.M. (1996) – "Estimating prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature." Journal of Gambling Studies, 12.

South Africa (1995) – Main Report on Gambling in the Republic of South Africa. Lotteries and Gambling Board. Pretoria. Government Printer.

South Africa (1996). National Gambling Act of 1996. Pretoria: Government Printer

Sproston, K, Erens, B et al (2000) – Gambling Behaviour in Britain: Results from the British Gambling Prevalence Study. National Centre for Social Research, London.

Stinchfield, R. Cassuto, N, Winters, K and Latimer, W. (1997) "Prevalence of gambling among Minnesota public school students in 1992 and 1995." Journal of Gambling Studies, 13.

Sullivan, S; Carroll, B. et al (2000) "Problem gamblers: do GP's want to intervene? New Zealand Medical Journal, 113.

Vitaro, F, Fenland, F, Jacques, C and Ladouceur, R. (1998) – "Gambling, substance use and impulsivity during adolescence." Psychology of Addictive Behaviours, 12(3).

Volberg, R.A. (1994) – "The prevalence and demographics of pathological gamblers: Implications for public health", American Journal of Public Health, 84(2)

Westphal, J.R. Rush, J.A, Stevens, L and Johnson, L.J (2000)– "Gambling behaviour of Louisiana students in Grades 6 through 12." Psychiatric Services 51(1)

Winters, K and Anderson, N (2000) – "Gambling involvement and drug use among adolescents", Journal of Gambling Studies, 16(2)

Winters, K, Stinchfield, R and Fulkerson, J (1993)– "Patterns and characteristics of adolescent gambling." Journal of Gambling Studies, 9.

Winters, K, Stinchfield, R and Kim, L. (1995) – "Monitoring adolescent gambling in Minnesota." Journal of Gambling Studies. Vol 11(2)

Wynne, H.J. Smith, G.J. and Jacobs, D.F. (1996) – Adolescent Gambling and Problem gambling in Alberta. Prepared for the Alberta Alcohol and Drug Abuse Commission, Edmonton.

Zitzow, D. (1992) – "Incidence and comparative study of compulsive gambling behaviours between American Indian and Non-Indians within and near a Northern Plains Reservation." Indian Health Service Report, Minnesota Area Office, October.

Zuckerman, M. (1979) - Sensation Seeking: Beyond the Optimum Level of Arousal. Hillsdale, New Jersey. Lawrence Erlbaum.

Zuckerman, M. (1994) – Behavioural Expressions and Biosocial Bases of Sensation Seeking. New York: Cambridge University Press.

Zuckerman, M, Eysenck S and Eysenck, H.J. (1978) – "Sensation seeking in England and America" Cross-cultural, age and sex comparisons." Journal of Consulting and Clinical Psychology. 46(1)

APPENDIX 1: INVENTORY OF TARGET SCHOOLS

An "institutional issue" is a problem-issue defined by very substantial divergence from the norm for the overall sample.

The following is meant to constitute no more than a heuristic indication.

The locations of schools have been confused purposely to prevent exact identification.

INSTITUTIONAL FEATURES	INSTITUTIONAL ISSUES	NO OF PARTICIPANT LEARNERS (In Survey)
Target 1 – Cape Historically white/multicultural: public: urban: girls school.		138
Target 2 – Gauteng/Mpumalanga Public "township" school, pre-dominantly African, co-educational.	High "mother gambles" Low learner self-esteem Low AIDS awareness High "like to gamble a little". Very high Lotto participation	207
Target 3 – Cape Historically white/multicultural: suburban: public: co-educational.	High school aversion High teacher aversion	138
Target 4 - Cape Urban technical: public: multicultural: pre-dominantly male: dual-medium.	High school aversion High alcohol consumption High drug consumption High casual sex	136
Target 5 - Cape Rural: pre-dominantly Coloured: public: co-educational.	Low learner self-esteem	164
Target 6 - Cape Rural: pre-dominantly Coloured: public: co-educational.	High parental assault	163
Target 7- Cape Religious-based: "township": private/independent: predominantly African/Coloured.	Low nuclear families Poor peer relations High teacher aversion High lotto participation	145
Target 8- North-West/Limpopo/Free State Urban: Afrikaans-medium: pre-dominantly white: public: co-educational.		144
Target 9- North-West/Limpopo/Free State Urban: private/independent: predominantly white: co-educational.	Poor parental communication. High "Like to gamble a little". High income gambling	65
Target 10-North-West/Limpopo/Free State Urban, predominantly African: "township": public co-educational.	Low nuclear families High mother "gambles" High parental alcohol High parental assault High teacher assault Low AIDS awareness High "like to gamble a lot". High "like to gamble a little".	108

INSTITUTIONAL FEATURES	INSTITUTIONAL ISSUES	NO OF PARTICIPANT LEARNERS (In Survey)
	Very high lotto participation High casino attendance High income gambling	
Target 11- KZN-Natal Public: urban: pre-dominantly Indian: lower socio-economic co-educational.	High "no adults". High school aversion Poor peer relations High teacher aversion High alcohol consumption High drug consumption High "like to gamble a lot". High race wagering High lotto participation High casino attendance High income gambling	186
Target 12-KZN-Natal Public: urban: predominantly Indian: co-educational.	High parental alcohol High "like to gamble a lot". High casino attendance	148
Target 13-KZN-Natal Public: urban predominantly Indian: upper socio-economic: co-educational.	Poor peer relations Very high teacher aversion	136
Target 14-KZN-Natal Historically white/multicultural: urban: public: upper socio-economic girls school.		171
Target 15-KZN-Natal Rural:public: African: co-educational.	High "no adults" High "father gambles" Very high teacher assault High casual sex Very high "like to gamble a little". Very high "like to gamble a lot".	142
Target 16-North-West/Limpopo/Free State Rural, public: African co-educational.	High no adults High "mother gambles" High "father gambles" High teacher assault High lotto participation High casino attendance High income gambling	135
Target 17-North-West/Limpopo/Free State Peri-urban: African: technical: co-educational	Low learner self-esteem High "like to gamble a little".	137
Target 18-Gauteng/Mpumalanga Historically white/multicultural: urban: public: co-educational.	Poor parent communication High "father gambles" Poor peer relations High alcohol consumption High drug consumption High casual gambling High income gambling	186

INSTITUTIONAL FEATURES	INSTITUTIONAL ISSUES	NO OF PARTICIPANT LEARNERS (In Survey)
Target 19-Gauteng/Mpumalanga Private/independent: multicultural: urban: co-educational.	Low nuclear families	212
Target 20-Cape Peri-urban: public: predominantly Coloured: co-educational.	High alcohol consumption. High "like to gamble a little". Low AIDS awareness	163
Target 21-Gauteng/Mpumalanga Religious-based: private/independent: urban: co-educational.	High school aversion High "like to gamble a little". High "like to gamble a lot."	84
Target 22-Gauteng/Mpumalanga Urban: private/independent: high socio-economic co-educational	High alcohol consumption High casual sex High income gambling	142
Target 23-Gauteng/Mpumalanga Historically white/multicultural: urban: public: co-educational.	High alcohol consumption	141
Target 24-Gauteng/Mpumalanga Urban: African "township": public: co-educational.	High "like to gamble a little". Low AIDS awareness	149
Target 25-North-West/Limpopo/Free State Urban: private/independent: predominantly African: co-educational.	Poor parent communication	112
Target 26-North-West/Limpopo/Free State Rural: private/independent: African: co-educational.	High casual sex	95
Target 27-Cape Historically white/multicultural: public: urban: co-educational.	High drug consumption High casual gambling	153
Target 28-Cape Rural: African: public: co-educational.	Low nuclear families High "no adults" Very high parental alcohol Very low learner self-esteem Very high parental assault Very high teacher assault Low AIDS awareness High "like to gamble a little". High "like to gamble a lot".	157

APPENDIX 2: QUESTIONNAIRE

NATIONAL YOUTH SURVEY
ATTITUDES TO GAMBLING

National Gambling Board and University of the Witwatersrand, Johannesburg

The National Gambling Board and the University of the Witwatersrand are conducting this survey. Our aim is to find out more about what young people think about life and about gambling in South Africa. The results of the survey will be used to help us develop a better understanding of how gambling affects peoples' lives.
Please remember that everything that you tell us will be treated confidentially. Although your answers will be incorporated in the findings of our study, no one will ever know what you have said.

Name of school: _____

Background:

1. **Gender** — Male | Female
2. **Grade** — 10 | 11 | 12
3. **Age** — 14 | 15 | 16 | 17 | 18 | 19
4. **How do you describe yourself** — African | Coloured | Indian | White

5. Which adults do you live with most of the time? [tick one only]

Both biological (real) parents [Mother and Father]	A
Biological (real) mother only	B
Biological (real) father only	C
Adopted parent or parents	D
Stepmother or stepfather	E
Other relative (uncle, aunt, grandparents etc.)	F
Don't live with any adults	G

6. When you have problems at home, are you able to [tick one only]

Talk to both parents (or both the adults who look after you) about your problems	A
Only talk to your mother (or the female adult who looks after you) about this problem	B
Only talk to your father (or the male adult who looks after you) about this problem	C
I cannot talk to my parents (or any of the adults who look after you) about my problems	D

7. Think about the adults that you live with. Do you think any of them bet or gamble frequently for money? [tick as many as necessary]

	YES	NO
Mother (or the female adult who looks after you)	A-1	A-2
Father (or the male adult who looks after you)	B-1	B-2
Older sister	C-1	C-2
Older brother	D-1	D-2

8. Think about the adults that you live with. Do think any of them drink too much/too frequently? [tick as many as necessary]

	YES	NO
Mother (or the female adult who looks after you)	A-1	A-2
Father (or the male adult who looks after you)	B-1	B-2
Older sister	C-1	C-2
Older brother	D-1	D-2

SCHOOL AND PRIVATE LIFE

9. How do you feel about going to school?

I like school very much	A
I like school quite a bit	B
I don't like school very much	C
I hate school	D

10. Which of the following best describes your future plans [Tick one only]

I would like to quit school as soon as possible	A
I would like to finish high school but not go further with my education	B
I would like to study further after I complete school	C
I have no plans for when I finish school	E

11. How do you feel about the other students at your school?

I like the other students very much	A
I like the other students quite a bit	B
I don't like the other students much	C
I hate the other students	D

12. How many of your teachers …

	All	Most	Some	A few	None
Are interested in you as a person?	A-1	A-2	A-3	A-4	A-5
Show respect for the students?	B-1	B-2	B-3	B-4	B-5

13. What do you think about each of the following statements:

	Disagree	Mostly disagree	Mostly agree	Agree
I usually feel good about myself	A-1	A-2	A-3	A-4
I am able to do things as well as most other people my age	B-1	B-2	B-3	B-4
Sometimes I think that I am no good	C-1	C-2	C-3	C-4
I feel that I cannot do anything right	D-1	D-2	D-3	D-4

14. Have any of the following people ever hit <u>you</u> so hard or so often that you had marks or were afraid of:

	YES	NO
A parent (or an adult that looks after you at home)	A-1	A-2
A teacher	B-1	B-2

15. Think of the last 12 months, how often have you

	None	Once or twice	Often
Had too much to drink	A-1	A-2	A-3
Used drugs (to make yourself "high')	B-1	B-2	B-3

16 Tell me how much you like to do the following things when you are outside of school: [Please tick all]

	Don't like	Like a little	Like a lot
Homework or study	A-1	A-2	A-3
Dance or listen to music	B-1	B-2	B-3
Play sport	C-1	C-2	C-3
Watch TV	D-1	D-2	D-3
Play computer or video games	E-1	E-2	E-3
Read books for pleasure	F-1	F-2	F-3
Work to make pocket money	G-1	G-2	G-3
Hang out or relax with friends	H-1	H-2	H-3
Gamble	I-1	I-2	I-3
Do community work	J-1	J-2	J-3

17 Do you use a computer at home?

YES	NO

18 I am sure that you have heard about the problem with HIV and AIDS. In your opinion, do you believe that:

	YES	NO
People must use a condom with every one they sleep with	A-1	A-2
People must only use a condom when they sleep with someone for the first time	B-1	B-2
People should enjoy life and stop worrying about HIV and AIDS	C-1	C-2

BELIEFS ABOUT LIFE

19 Do you think that the following statements are true or false?

	TRUE	FALSE
Alcohol in moderation is OK	A-1	A-2
Dagga in moderation is OK	B-1	B-2
Sex with my friends is OK	C-1	C-2

20. Have you ever placed a bet for money or gambled on something like the lotto or the casino?

YES	NO

21 How do you feel about gambling? [tick one only]

Gambling is OK in general	A
Gambling is OK within certain limits	B
I don't like gambling but others can if they want	C
Gambling should be banned	D

22 If you don't gamble much – why not (tick one only)

Because I don't like to gamble	A
I have no access to gambling facilities	B
I have no spare money	C
My friends or parents would not like it	D

Other reason (specify): _____

23 Do you think that the following statements are true or false?

	TRUE	FALSE
Gambling is OK in general	A-1	A-2
Gambling is OK within certain limits	B-1	B-2
I don't like gambling but others can if they want	C-1	C-2
Gambling should be banned		

24 Whether you gamble or not, please tell me whether you think that the following statements are true or false:

	TRUE	FALSE
Knowledge of math can help you to win at lotteries	A-1	A-2
Staying at the same slot machines improves your chances of winning	B-1	B-2
It would be foolish to bet on the number 18 if 18 had come up recently	C-1	C-2

25 How often you have done these activities (a) in your lifetime and (b) in the last 12 months?

	In your life				In the last 12 months			
	Never	Occasion-ally	Monthly	Weekly	Not in past 12 months	Occasion-ally	Monthly	Weekly
Flipped or spun coins for money	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8
Bet on a sports game	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
Bet on a horse race	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8
Bet on a fight for money (or fought someone for money)	D-1	D-2	D-3	D-4	D-5	D-6	D-7	D-8
Played dice games for money	E-1	E-2	E-3	E-4	E-5	E-6	E-7	E-8
Played the Lotto	F-1	F-2	F-3	F-4	F-5	F-6	F-7	F-8
Played a Scratch Card	G-1	G-2	G-3	G-4	G-5	G-6	G-7	G-8
Gambled at a casino	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8
Played cards for money	I-1	I-2	I-3	I-4	I-5	I-6	I-7	I-8
Played a game for money on the internet	J-1	J-2	J-3	J-4	J-5	J-6	J-7	J-8
Played a game for money on your cell phone	K-1	K-2	K-3	K-4	K-5	K-6	K-7	K-8
Bet on a game of skill	L-1	L-2	L-3	L-4	L-5	L-6	L-7	L-8

IF YOU DO NOT GAMBLE ON A REGULAR BASIS, THEN YOU DO NOT NEED TO GO FURTHER.

Thank you very much for helping us.

IF YOU GAMBLE ON A REGULAR BASIS, PLEASE CONTINUE AND ANSWER THE NEXT FEW QUESTIONS

26 What is the largest amount of money that you have ever gambled? [answer one only]

R1 to R5	A
R6 to R20	B
R21 to R50	C
R51 to R100	D
R101 to R200	E
R200 or more	F

27 How often have you gone back another day to try and win back the money you lost

Every time	A
Most of the time	B
Some of the time	C
Never	D

28	**When you were betting, have you ever told others you were winning money when you really weren't**	YES	NO
29	**Has your betting caused problems for you such as arguments with family and friends?**	YES	NO
30	**Have you ever gambled more than you planned to?**	YES	NO
31	**Has anyone criticised your betting or told you that you had a gambling problem?**	YES	NO
32	**Have you ever felt bad about the amount that you bet or about what happens when you bet?**	YES	NO
33	**Have you ever felt that you would like to stop betting money but didn't think you could?**	YES	NO
34	**Have you had arguments with family and friends because of the money you spent on gambling?**	YES	NO
35	**Have you borrowed money to bet and not paid it back?**	YES	NO
36	**Have you ever skipped or been absent from school or work due to betting activities?**	YES	NO
37	**Have you borrowed money or stolen something in order to bet or to cover gambling debts?**	YES	NO

38. What is your main reason for gambling on a regular basis? [Tick one only]

To make more money	A
To pay people whom I owe money	B
Because its exciting	C
Because my friends do it	D
Because I always gamble	E

39. If you gamble and win money: what do you spend most it on? [Tick one only]

Pay back the money I owe other people	A
Buy luxury items (cell phone, fancy clothes, pizza, etc.)	B
Buy necessities (groceries, school clothes, etc.)	C
Save the money	D
Entertainment (movies, sports, etc.)	E
More gambling	F

Something else (specify): _____

40. Where do you get most of your money from to cover your gambling expenses? [answer one only]

Parents	A
Brothers or sisters	B
Other relatives (aunt, uncle, etc.)	C
Friends	D
Money lender / Mashonisa	E
Sold things to get money	F
Stole the money	G

Thank you for helping us

NOTES

[i] Pearson correlation. Correlation significant at the 0.01 level (2-tailed). N=3222 (class) N =3122 (gambling)

[ii] Pearson correlation. Correlation significant at the 0.01 level (2-tailed). N=3222 (class) N=2647 (risk)

[iii] Pearson correlation. Correlation significant at the 0.01 level (2-tailed). N=3222 (class) N=2556 (risk-narcissism)

National Gambling Board
DTI Campus,
Block E, 2nd Floor
Sunnyside
Tel: 012 394 3800
Fax: 012 394 4800
e-mail: info@ngb.org.za
www.ngb.org.za