FOR INSIDE FRONT COVER

The Ministerial Council on Gambling is comprised of the Ministers responsible for gambling in each State and Territory Government and the Australian Government. The objective of the Council is to minimise the adverse consequences of problem gambling via the exchange of information on responsible gambling measures and by acting as a forum for discussion and facilitation of the development of an effective interventions framework.

The Ministerial Council on Gambling established Gambling Research Australia, (formerly known as the National Gambling Research Working Party) to administer its research program. The Secretariat is provided by the Office of Gaming and Racing, Department of Justice, Victoria. Further information about the national research program may be obtained from: www.gamblingresearch.org.au

The first research project to be commissioned by Gambling Research Australia - *Problem Gambling and Harm: Towards A National Definition* - was undertaken by the South Australian Centre for Economic Studies jointly with the Department of Psychology, University of Adelaide. The research project sought expert advice about definitions of problem gambling that best suit the ongoing research program and that could assist jurisdictions in making policy decisions.

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Problem Gambling and Harm: Towards a National Definition

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Executive Summary

Overview and major conclusions

The Ministerial Council on Gambling has nominated seven national research priorities for gambling research. The National Gambling Research Program Working Party oversees the research agenda. This report has been prepared in response to the first of the seven national research priorities for gambling research: *National definitions of problem gambling and consistent data collection*.

The project involved two major tasks:

- A literature review of definitions of problem gambling and gambling-related harm and gambling screens and measurement instruments; and
- Obtaining feedback on the material developed in the literature review.

The literature review comprises Chapters 2 to 7 of this report. In order to obtain comments in a semi-structured form, the literature review was widely circulated with a "Call for Comments" on particular questions. The "Call for Comments" is reprinted in this report following the Executive Summary. Feedback on the material developed in the literature review and in response to the "Call for Comments" is summarised in Chapter 8. Our conclusions with respect to the elements stakeholders would prefer to see in a national definition of problem gambling and their views with respect to gambling screens and instruments are presented in Chapter 9.

On the basis of the feedback that we received — the majority of which suggested the definition should contain reference to both gambling behaviours and to harms — we recommend that the following definition of problem gambling be adopted as the national definition:

"***Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or for the community."***

Reference to "difficulties in limiting money and/or time spent on gambling" implies a continuum of gambling behaviours from those who have no difficulty (including non-gamblers) to those who have extreme difficulty so that no direct reference to a continuum need be incorporated into the definition. Our view is that the proposed definition is shorter and sharper and therefore has more impact (without being any less useful) than a definition that incorporates reference to a continuum.

The following table describes the relevance of the proposed national definition to the principal foci of stakeholders' gambling-related work. It also sets out - where necessary - the shortcomings - of the definition from the perspectives of some groups of stakeholders.

Our view is that it will be impossible to find a definition that will be acceptable to all stakeholders, particularly in the light of many Australian stakeholders resistance to a medical or pathological approach to problem gambling. Nonetheless, many stakeholders are of the view that there should be a national definition of problem gambling.

Implications of the national definition to different stakeholders

Stakeholder	Principal focus of gambling-related work	Appropriate Measure	Relevance of national definition
Psychological Researchers	• Differentiation of problem from problem gamblers • To obtain adequate score variability for analyses • Focus on causes of gambling and behaviour	SOGS, VGS, DSM-IV	• Behavioural element is most important • The focus is on the causes of excessive gambling as indicated by expenditure patterns and its causes whether behavioural, cognitive or physiological
Social workers/ Counsellors	• Identifying problem gamblers • Monitoring change due to interventions • Community education	SOGS, VGS, CPGI	• Initial interest in the harms requiring immediate attention • Secondary need to monitor changes in behaviour over time • Educate community about links between gambling behaviour and adverse consequences
Clinical Psychologists	• Identify problem gamblers • Identify problematic behaviours, cognitions and situations • Monitor change due to interventions	SOGS, VGS, CPGI Gambling Urges	• Interest in the behavioural component of definition, i.e., the causes of excessive behaviour
Psychiatrists/ Medical practitioners	• Diagnosis of underlying pathology • Require confirmation that pathology is absent or present	DSM-IV	• Behavioural and harm element of definition only symptomatic of underlying problem • Definition only underscores the need for screening prior to formal diagnosis
Sociologists	• Identify social causes of problem gambling • Identify broader community impacts • Cultural and social meaning and function of gambling • Understand group behaviour and environmental experiences	Attitudinal surveys Qualitative methods Observational methods	• Focus on individual behaviour in definition may not capture broader social influences • Need to supplement standard psychometric measures with studies of social environment, developmental experiences, function of gambling within social groups

Stakeholder	Principal focus of gambling-related work	Appropriate Measure	Relevance of national definition
Geographers	• Identify spatial distribution of harm • Relationship between behaviour and gambling opportunities	SOGS, CPGI, VGS	• Both harm and behavioural element are important
Regulators	• To reduce harm • Efficacy of policy and regulation of gambling products on behaviour	CPGI, VGS, SOGS	• Both harm and behavioural component is important • How does regulation reduce excessive time and money spent on gambling and the associated harms?
Educators	• To reduce harm • To draw attention to the risks of gambling and problematic behaviours • Increase awareness	***SOGS, GA-20*** VGS CPGI	• Both harm and behavioural elements are important
Judiciary	• To identify acceptable explanations for offending • Are there grounds for mitigating sentences based on diminished capacity, impaired judgment?	DSM-IV	• The definition does not imply a pathology sufficient to influence court decision-making concerning the mental state of defendants • Any measure encapsulating the definition would be considered a screening tool requiring more formal diagnostic testing
Social policy/ Government services	• To reduce harm • To design appropriate services to assist those who are adversely affected	VGS	• The harm component of the definition is most important
Industry	• To identify those who appear to be gambling excessively to their detriment • Venue and product innovations to encourage responsible gambling	SOGS VGS CPGI	• The behavioural element is most important
Epidemiologists	• To identify the prevalence of problem gambling	CPGI	• The harm and behavioural elements of the definition could both be used to identify problem gamblers

A number of stakeholders suggested it might be useful to have separate definitions for problem gambling and pathological gambling. We see merit in this proposal but a definition of pathological gambling would need to be the subject of a separate research project focused on the needs of stakeholders who are required to make clinical diagnoses.

The general consensus was that there is a need for a consistent measurement tool in Australia to allow comparisons across States and Territories and across time.

The CPGI (with refinements to clarify the cut-off points) is the preferred measurement tool for population-level research. The SOGS may also need to be used to allow for comparisons with previous studies. Both the SOGS and the DSM-IV are accepted as useful tools for counselling and assessment purposes.

In the short-term, the best option is to continue to use current measures but to combine them with other instruments that capture elements for items that appear to be missing or inappropriate (e.g., for younger or older people, Indigenous persons and persons with ethnic backgrounds). Also, many existing items in current measures are not suitable because the prevalence rate of the items is either too high or too low.

In the longer-term, there are greater opportunities to refine existing measures so that they are better able to capture the critical elements of problem gambling. One possible starting point might be to develop a measure that clearly differentiates between harm and problematic behaviour in two separate subscales. That is, a person would be classified as a problem gambler if they displayed behaviours that indicated difficulties in the ability to limit time and money on gambling, and if they experience significant harms associated with their gambling. *A measure that clearly differentiates between harm and problematic behaviour in two separate subscales would be able to classify people in more than one way to identify those who were at future risk, currently at risk, or already experiencing significant problems. This would be consistent with the proposed national definition of problem gambling*.

In our view (and that of the majority of stakeholders who provided us with feedback), the inclusion of behaviour in the national definition is important because it recognises the practical realities of regulation and clinical interventions, and may also encourage a greater focus on the continuum model of gambling.

By including reference to behaviour as well as to harm in the definition of problem gambling we have suggested above, we do not wish to imply that gamblers should be seen as being to blame for their problems, or that concern with broader regulatory, policy or accessibility issues are any less important. Instead, by shifting some of the emphasis away from harm, we hope that this will encourage greater interest in research into gambling in general; in particular, research into the experiences and characteristics of those who gamble without developing harms. This may prove a very useful step towards enhancing our understanding of problem gambling.

The literature review

Defining problem gambling

Nomenclature

There are a plethora of terms used to describe 'problem' gambling in the literature – 'problem', 'pathological' and 'compulsive' being the most common - but 'addictive', 'excessive', 'disorderly', 'Level 2' and 'Level 3', 'at-risk', 'in-transition', 'degenerate' and 'potential pathological' are also used.

'Problem gambling' is frequently used, particularly in North America, to denote a level of gambling, which is at an earlier stage, or which leads to fewer problems than the later stage or more severe problems experienced or caused by those gamblers who are clinically diagnosed as 'pathological gamblers'.

In Australia, the term 'problem gamblers' tends to encompass gamblers who are experiencing problems but who do not meet the diagnostic criteria and gamblers who are clinically diagnosed as problem or pathological gamblers.

Conceptualising problem gambling

Many definitions of problem gambling tend to fall into one of a number of categories: problem gambling as a medical disorder/mental health problem, as an economic problem, as lying on a continuum of gambling behaviour, expressed in terms of harm to the individual and to others, and as a social construct. However, these categories are not mutually exclusive. For example, one could look at the development of problem gambling using a continuum model and in reference to problematic behaviours. A national definition of problem gambling that meets the needs of all stakeholders in a diverse range of contexts will probably need to be referenced to both individual gambling behaviours and to harms and so may draw on several of the following conceptualisations of problem gambling.

A. Medical disorder/mental health approach

The primary definition in the medical disorder/mental health approach is the American Psychiatric Association DSM-IV (1994) definition:

> *"… persistent and recurrent maladaptive gambling behaviour that disrupts personal, family and vocational pursuits"*

The United States National Research Council (1999, pp. 20-21) referred to widespread support in the United States and in the research literature for pathological gambling defined as:

> *"[a] mental disorder characterised by a continuous or periodic loss of control over gambling, a preoccupation with gambling and with obtaining money with which to gamble, irrational thinking, and a continuation of the behaviour despite adverse consequences".*

Definitions that characterise problem gambling as a medical disorder/mental health problem underpinned by diagnostic criteria:

- allow for clinical diagnosis;
- are useful for measurement, research and replication;
- may be useful for planning public policy; and

- gamblers are not held responsible for their gambling problems, but are encouraged to work towards recovery once diagnosed.

Against accepting a definition based on the medical disorder/mental health approach:

- there is dispute as to whether a dichotomy exists between problem gambling and non-problem gambling,
- there is little evidence for underlying pathology;
- cultural, social and environmental factors are not taken into account;
- it does not serve the needs of those who are not diagnosed as problem gamblers and yet have gambling-related problems; and likewise,
- it does not serve the needs of service providers.

B. Gambling and problem gambling as an economic activity

Most gambling problems, although not all, are the result of gamblers spending beyond their means. The term most often used to define problem gambling when it is characterised as an economic activity is excessive gambling. A typical definition is Blaszczynski, Walker, Sagris and Dickerson's (1997, pp. 6-7) definition:

> *"Excessive gambling is used to describe a level of gambling expenditure that is considered to be higher than can be reasonably afforded relative to the individual's available disposable income and as a result produces financial strain".*

Although gambling beyond one's means may not be sufficient to define problem gambling, this aspect of problem gambling is the one that is almost always the source of other problems associated with problem gambling. It is usually financial problems that distinguish so-called problem gamblers from other gamblers whose gambling behaviours might otherwise be identical. Thus, any definition of problem gambling, if it is to be of much use to any stakeholders other than clinicians who need only deal with individual behaviours, must incorporate this aspect of problem gambling. Certainly, spending beyond one's means is the aspect that many self-identified problem gamblers use to classify themselves as such.

C. Gambling and problem gambling as a continuum

Many of those who do not favour the medical disorder/mental health approach to problem gambling view gambling as a continuum ranging from social or recreational gambling where there are no adverse impacts through to problem gambling where gambling leads to adverse consequences for the individual, his or her family, friends and colleagues, or for the community through to pathological gambling where the adverse consequences tend to be more severe and the pathological gambler is defined in relation to some diagnostic criteria. Although it did not put forward its own definition of problem gambling, viewing problem gambling as a continuum is the approach favoured by the Productivity Commission.

Dickerson (1991, quoted in O'Connor , Ashenden, Raven, Allsop, Peckham and Quigley 1999, p. 2) defined problem gambling in terms of a continuum as follows:

> *"Problem gambling is essentially a behaviour that will present in varying degrees and forms. That is, gambling involvement rests on a continuum from occasional non-problematic use through to extreme over-involvement, with a host of related problems that may be accompanied by a sense of impaired control".*

In the continuum approach to problem gambling, the threshold for determining that a person is a problem gambler depends on judgements as to what levels of severity are policy relevant.

Definitions of problem gambling based on the continuum approach are:

- broad enough to encompass all those who could be identified as having a gambling problem;
- focussed on adverse consequences rather than underlying pathology;
- contextually based (i.e., they take into account cultural, social and environmental factors); useful for intervention from the perspective of service providers; and
- the way in which problem gamblers themselves tend to talk about problem gambling behaviours.

However, problem gambling defined in terms of a continuum:

- leads to difficulties for diagnosis, objective measurement, research and replication; and
- may not provide a sound basis for planning public policy.

D. Problem gambling defined in terms of harm

In recent years, Australian researchers and practitioners have tended to favour defining problem gambling in terms of the harms it gives rise to for the individual and to any other persons affected by that individual's gambling behaviour. The primary harm-based definition used in Australia is that of Dickerson, McMillen, Hallebone, Volberg and Woolley. (1997, p. 106):

> *" 'Problem gambling' refers to the situation when a person's gambling activity gives rise to harm to the individual player, and/or to his or her family, and may extend into the community"*.

A very similar harm-based definition was developed by the Canadian Inter-Provincial Task Force on Problem Gambling (Ferris and Single, 1999) to underpin the development of the Canadian Problem Gambling Index (CPGI) which is used in Queensland.

Harm-based definitions, although broader than definitions based on a clinical approach, can:

- encompass a clinical approach if desired;
- distinguish social gambling from problem gambling,
- be referenced both to individual behaviours and to the impacts on others;
- be contextually based,
- underpin eclectic approaches to dealing with problem gambling, and
- be useful from the perspectives of service providers and for monitoring service usage.

Definitions based on harm, however, have been criticised because of their lack of precision. Making a harm-based definition operational is difficult. Harm-based definitions:

- use subjective criteria;
- are inadequate for measurement, replication and research;
- cannot be used to research innate characteristics or causes of problem gambling; and

- support only limited measures in assessing the assistance required by individual gamblers from a public policy planning perspective.

Socio-cultural aspects of problem gambling

Many studies have found that problem gamblers are most likely to be young, male, unmarried, unemployed, less educated and have other co-morbidities such as mental health problems and alcoholism. Problem gamblers favour continuous forms of gambling: electronic gaming machines, casino gaming, and to a lesser extent TAB gambling. More women have sought assistance with gambling-related problems as electronic gaming machines have become more widespread.

There is some evidence that the prevalence of problem gambling is higher among non-Caucasians and Indigenous groups, but these groups are less likely to access gambling support services because of the shame attached to burdening people outside the family with problems felt by persons in some cultures, and because of a lack of culturally appropriate and language-specific support services.

A Western Australian study (Tan-Quigley, McMillen and Woolley, 1998) found that definitions of social gambling and problem gambling are culturally specific, deeply entrenched and not subject to easy modification. This characterisation of problem gambling is supported by many other studies into the socio-cultural aspects of problem gambling. Ethics of a particular community, positive and negative views with respect to gambling, whether a particular community is collectivist or individualistic all affect attitudes to gambling and the ways in which various communities deal with problem gambling.

Defining harm

In Australia, problem gambling is now generally defined in terms of its social impacts rather than with reference to individual behaviours. Current definitions of gambling-related harms tend to be couched in general terms. The *New Zealand Gambling Act 2003* contains a specific definition of harm that encompasses broader social impacts:

> "*Harm-*
>
> *(a)* *means harm or distress of any kind arising from, or caused or exacerbated by, a person's gambling; and*
>
> *(b)* *includes personal, social, or economic harm suffered-*
>
> *(i)* *by the person; or*
>
> *(ii)* *the person's spouse, partner, family, whanau, or wider community; or*
>
> *(iii)* *in the workplace; or*
>
> *(iv)* *by society at large".*

The Queensland Government Treasury's (2002, p. 3) definition of problem gambling also contains within it a definition of harm:

> *"… a range of adverse consequences where:*
>
> - *the safety and wellbeing of gambling consumers or their family or friends are placed at risk, and/or*
> - *negative impacts extend to the broader community."*

The above definitions of harm are so imprecise that it may be almost impossible to make them operational. Harm is such a subjective concept dependent on value judgements, social norms, cultural mores and environmental factors that it is unlikely that a precise definition of gambling-related harm to suit the needs of all stakeholders is possible. Most stakeholders use lists of harms with reference to (in some cases) mental health problems, relationships (spousal, family, friends, work colleagues), financial problems, employment outcomes and legal problems.

List of potential harms might suggest strategies that need to be in place to assist those experiencing harms, but of themselves, they do not contribute to a definition of gambling-related harm that can be used for the purposes of measurement, prediction and evaluation.

Harm minimisation, harm reduction and responsible gambling

In very recent years there has been a shift toward the concepts of harm minimisation or harm reduction and responsible gambling that reflects a shift towards viewing problem gambling as a community health issue. A typical definition of harm reduction is the following definition adapted by the Canadian Public Health Association from the definition used by the Canadian Centre on Substance Abuse:

> *"Harm reduction refers to a policy or program directed towards minimizing or decreasing the adverse health, social and economic consequences of gambling behaviour for individuals, families, communities and society. A harm reduction strategy does not require abstention from gambling".*

Some stakeholders are, however, critical of the concepts of harm minimisation and harm reduction because of the vagueness of the notion of harms.

The *New Zealand Gambling Act 2003* (p. 22) defines responsible gambling as follows:

> *"responsible gambling means lawful participation in gambling that is-*
>
> *(a) Lawful, fair and honest; and*
>
> *(b) conducted-*
>
> *(i) in a safe and secure environment; and*
>
> *(ii) without pressures or devices designed to encourage gambling at levels that may cause harm; and*
>
> *(iii) by informed participants who understand the nature of the activity and do not participate in ways that may cause harm."*

Often, as above, it is the legislation, rather than the literature that comes closest to providing "definitions" (albeit imprecise) of gambling-related harms, harm minimisation or harm reduction and responsible gambling.

Measurement of problem gambling

Ideally, problem or pathological gambling assessments should be underscored by theoretical principles and a clear definition of the construct.

The purposes of assessment

Assessments have 4 principal functions: identification, classification, description and therapeutic.

- *Identification*: screening vs. diagnosis. Screening involves the identification of people who might have gambling problems whereas diagnosis involves the formal classification of positive cases.
- *Classification*: cases vs. non-cases, levels of problem severity, current risks vs. future or predicted risk. Measures can categorise people as having the disorder or not having the disorder, indicate the severity of the problem, and/ or identify those currently or at future risk of becoming positive cases.
- *Description*: Problem gambling behaviour vs. consequences. Assessments can describe the problems caused by gambling, or the behaviour itself.
- *Therapeutic*: Problem assessment and index of therapeutic change. Assessments can identify the problems affecting gamblers so as to identify the most appropriate intervention or services. They can also be used to measure the effectiveness of these interventions.

Characteristics of effective measures

Measures need to be assessed in terms of their reliability, validity, practicality, applicability and comparability.

- *Reliability* refers to the consistency or stability of measurement (test-retest) or internal consistency of the measure.

Validity

- *Internal Validity* refers to the extent to which the assessment measures what it is supposed to measure. Validity is confirmed using a variety of indicators or appraisals. These include: construct validity, classification accuracy, the appropriateness of validation samples, dimensionality, external validation, concurrent validity and item variability.
- *Construct validity* is influenced by the choice of theoretical model governing the definition of problem gambling (e.g., medical pathology, psychological habit, social or cultural phenomenon), whether one adopts a categorical or continuum model, and definition (whether problem gambling is defined in terms of its behaviour, consequences or both).
- *Classification accuracy* refers to the level of sensitivity and specificity. Sensitivity refers to the probability of being able to identify true cases and avoid false negatives. Specificity refers to the ability to avoid misclassifying non-cases (i.e., false positives).
- *Appropriate validation samples:* Many assessment methods were validated using comparison samples that were too dissimilar to the problem gambling sample, so it is unclear whether the problems identifiable with problem gamblers are merely symptoms of regular gambling.

- *Dimensionality*: A coherent definition of gambling should yield measurement items that all tap into the same underlying construct.
- *External validation*: Problem gambling scores should correlate with known co-morbidities or correlates of problem gambling (e.g., anxiety and depression).
- *Concurrent validity*: Newly developed assessments should be highly correlated with existing measures.
- *Item variability*: Items should be selected so as to avoid items with very high or very low base-rates. If the base-rate is too high, the items may not be true indicators of problem gambling, whereas if too low, they will not be able to assess the varying degrees of problem gambling and possibly lead to the exclusion of positive cases.
- *Practicality:* Practical assessments are those which are short, easy to administer, which require no training, and which are cost-effective.
- *Applicability:* This refers to the extent to which the assessment can be applied in different populations. The principal contexts identified included: community prevalence studies, research involving gamblers, clinical diagnosis and therapeutic change. The appropriateness of an assessment is also influenced by demographic factors such as gender, age, socio-economic status and culture. Items in some scales may be less applicable for specific subgroups. Problematic examples include borrowing items, those referring to employment, marital relations and specific forms of financial transactions. These items may not be entirely suitable for administration to older samples, indigenous people, or women from more patriarchal cultures.
- *Comparability*: The historical usage of certain measures may encourage their continued use because of the need to obtain comparative longitudinal data.

Review of measures

DSM classification

The DSM classification for pathological gambling was first established in 1980 (DSM-III), modified in 1987 (DSM-III-R), and again in 1994 (DSM-IV). The DSM-III classification referred predominantly to the consequences of gambling, but was subsequently modified to address criticisms relating to the middle-class bias inherent in a number of the 7 criteria. The DSM-III-R classification was modelled on the criteria for alcohol addiction and included items relating to cravings, tolerance and withdrawal. The DSM-IV classification clarified the wording of the DSM-III-R and placed greater emphasis on the mood altering affects of gambling.

The DSM-IV focuses predominantly on pathological behaviours and significant consequences and yields lower prevalence rates than other measures. Nonetheless, the DSM-IV does not appear to measure a unitary phenomenon. In effect, it brings together two different classes of item: one group that refers to the pathology, and another that relates primarily to the consequences of excessive gambling.

A bi-axial model for problem gambling

	Severity of Gambling Consequences	
	Low	*High*
Low impaired control / Behavioural "pathology"	(A) Non-problematic gambling	(B) Gamblers in treatment + regaining control
High impaired control / Behavioural "pathology"	(C) Early stage problem gambling	(D) Late stage problem gambling

Several psychometric versions of the DSM-IV have been developed, including: a 10-item version by Fisher (2000), a 20-item version by Winters, Specker and Stinchfield (1997), 10 item version by Stinchfield and Winters (1996) and the 17-item NODS version used in recent North American prevalence studies. The best validated psychometric version of the DSM-IV is the 10-item Stinchfield and Winters (1996) version. The DSM-IV focuses predominantly on pathological behaviours and significant consequences and yields lower prevalence rates than other measures.

The emphasis on a traditional pathology or dependence model in the DSM-IV means that it is inconsistent with the theoretical approaches favoured by Australian researchers. Evaluation studies reveal that its criteria are not sufficiently variable or inclusive enough to make it suitable for community prevalence studies or to assess clinical change. It is best used as a diagnostic tool in clinical settings. The current cut-off score of 5 is too high and should be reduced to 4 out of 10 criteria. The psychometric versions of the DSM-IV have reasonably good psychometric properties.

South Oaks Gambling Screen (SOGS)

The 20-item SOGS (Lesieur and Blume, 1987) is the most widely used measure in the world and is based on DSM-III-R criteria. It was extensively validated when developed, but never against an appropriate comparison sample or using a community sample. A third of the items in the SOGS relate to consequences, 50 per cent to borrowing money, and the remainder relate to attitudes and behaviours. The SOGS does not appear to be grounded in a clearly defined theoretical framework.

Positive features of the SOGS include its ease of administration, availability of a cut-off score (usually 5+ for pathological gambling), and breadth of items. It has good internal consistency, reliability, and concurrent validity, but classification rates are poorer in community samples. It also does not appear to have a clear dimensional structure because of the mixture of different items.

Negative features include its over-representation of "softer" attitudinal and behavioural items that often lead to an excessive number of false positives, particularly when the measure is used in community prevalence studies.

SOGS appears to be appropriate to use to screen clients in clinical settings and as a measure to be included in research studies.

The Victorian Gambling Screen (VGS)

The VGS is the only measure of problem gambling developed in Australia (Ben-Tovim, Esterman, Tolchard and Battersby, 2001). It was appropriately validated and shown to have

good reliability, classification rates, dimensionality and concurrent validity. The principal subscale "harm to self" comprises 15 items scored on 4-point scales (range 0-60). Scores of 21 or higher indicate problem gambling.

The VGS shares some of the negative features of the SOGS: its inclusion of many "soft" items and the lack of a clear theoretical framework. A recent validation study of the VGS (McMillen, Marshall, Wenzel and Ahmed, 2004) confirmed the positive qualities described above, but found that the cut-off score of 21 is too high and suggested a reduction to 15.

The Canadian Problem Gambling Index (CPGI)

The CPGI was specifically developed as a measure of community prevalence (Ferris and Wynne, 2001). The initial validation study indicated that it had good psychometric properties. The CPGI is a 9-item scale with a score range of 0-27 with 8+ indicating severe problems. It has been validated in Canada, Europe and in two Australian studies. The measure typically yields lower prevalence rates than the SOGS.

Positive features include its ease of administration and brevity, and availability to classify varying degrees of severity. Possible negative features include its limited use in clinical settings or in research studies, as well as its inclusion of two of the least useful SOGS items (criticism and guilt associated with gambling).

Recent Canadian research suggests that the CPGI is possibly too similar in content to the SOGS and may therefore also give rise to false positives in community samples.

Other problem gambling instruments

A large number of other less widely used instruments were reviewed:

- *The Eight-Screen* (Sullivan, 1999) is a brief 8-item screening measure that can be used in medical or applied settings.
- The *Gamblers Anonymous Twenty Questions (GA-20)* is a useful screening device, but lacks a clear theoretical rationale. The GA-20 requires further validation before being validly used in large-scale prevalence surveys or as an indicator of therapeutic change.
- The *Scale of Gambling Choices* (see Baron and Blaszczynski, 1995) is a useful Australian measure of impaired control, which has good psychometric properties and concurrent validity. Some concerns have been raised about the redundancy of the items and interpretation.
- *The Lie-Bet Scale* (Johnson, Hamer, Nora, Tan, Eisenstein and Engelhart, 1997) is a 2-item measure of problem gambling with limited validity testing.
- *The Addiction Severity Index (ASI-G)* (Lesieur and Blume, 1992) is a modified version of the index used for other substance disorders. This has acceptable psychometric properties and provides a quantitative index of problem severity based on the frequency and intensity of gambling.
- *The Yale-Brown OCD scale* is a psychiatric measure used to measure the strength of gambling-related compulsions and obsessions (see Hollander, DeCaria, Finkell, Begaz, Wong and Cartwright, 1998, 2000; Zimmerman and Breen, 2000). The construct validity of this measure has been questioned given the dissimilarities between problem gambling and conventional obsessive compulsive disorders.

- *The Gambling Urges Scale* (Raylu and Oei, 2004) measures the strength of gambling-related urges and appears to be a useful complement to the Scale of Gambling Choices. However, there is some concern about the appropriateness of the validation sampling.
- *The Cumulative Signs Method* (Culleton, 1989) is a harm-based measure that identifies problem gamblers using 5 categories of harm, including personal, interpersonal, financial, vocational and "hard signs". Very little validation information is available concerning this method of assessment.
- *The HARM measure* (Productivity Commission, 1999) included a list of indicators of significant gambling problems that was used to validate the result of the SOGS in the 1999 national Australian survey. The scale has good face validity, but has not been subject to psychometric testing.
- *The G-Map* is an 85 question survey instrument designed to profile gamblers in Victoria. The instrument generates 17 descriptors or factors. This instrument is problematic in that there appears to be some overlap between "factors" and it does not appear to have been subjected to rigorous statistical testing.
- *The Gambling Interview Schedule (GIS) or Gambling Behaviour Interview* (Stinchfield, Govoni and Frisch, 2001) is a 32 item measure that was used in a validation study of the DSM-IV criteria. The results from this study were promising, although the scale lacks a clear theoretical focus, and has many items that appear to yield excessively high rates of endorsement.

Literature review of usage patterns

An extensive literature search was undertaken using academic search engines (e.g., PsychINFO, Sociofile, Medpubs), internet searches, conference proceedings and Government and research agencies (1999-2004). Searches focused on keywords pathological + gambling + measures. Over 150 publications were included in the review and profiled according to academic area, sample type, measure used and country of origin. Most articles were in the fields of psychology and psychiatry and published in psychology or gambling studies journals. Most studies have involved the administration of measures in treatment or clinical settings.

The SOGS is the most widely used measure in the world and has been used across all contexts: clinical assessment, prevalence and research studies. The SOGS is considered an acceptable measure for research purposes.

Clinical assessment tends to involve the DSM-IV as the first choice.

The choice of measure for prevalence research depends upon the country. Canada clearly now favours the CPGI, North America favours the SOGS and the NODS (psychometric version of the DSM-IV classification), whereas Australian researchers may be shifting towards using the CPGI or a combination of SOGS and CPGI to ensure comparability with previous Australian studies (McMillen, 2003). The DSM-IV is preferred in Europe and Asia.

Feedback on material developed in the literature review

1. Definitions

Industry responses

- There is a need to be clear about the objectives for having a national definition of problem gambling.
- A single definition may not suit all purposes.
- There is perhaps a need for two definitions: one definition for pathological gambling where the condition would be capable of clinical diagnosis, underpin treatment, and which might contain reference to mental health problems; and another definition for problem gambling which would underpin education, intervention and policy making.
- Several industry responses, although not all, favour the conceptualisation of problem gambling as a continuum.
- There is no clear agreement across industry responses as to the elements that should be included in a definition of problem gambling.

Government/public policy-makers

- Some responses favoured retaining "loss of control" in the definition as a key element of problem gambling; others did not as it suggests both that "external forces" are operating to affect people's behaviour and a link to mental health problems.
- Several responses suggested there is no need to have reference to the "causes" of problem gambling included in the definition.
- On the whole, government and policy makers seem to view a definition of problem gambling that takes account only of gambling-related harms as sufficient.
- No government/policy maker response regarded the concept of gambling-related harm as being too vague to be of practical use.
- Several responses viewed the definition put forward for comment as acceptable; one thought it lacked impact and another argued that a short pithy definition is required.

Researchers

- Key researchers did not respond to our "Call for Comments". They would probably argue that their views are adequately represented in the literature review.
- The researchers who did make responses think "loss of control" is an important element of problem gambling although Allcock suggests the term be replaced by "difficulties in limiting time and/or money spent on gambling".
- Some think the concept of gambling-related harm is vague; others do not.
- Several responses are of the view that the definition should include reference to what might be termed the "seduction" of electronic gaming machines.

Counsellors and service providers

- A person with a gambling problem should not be characterised as a problem gambler, i.e., don't define the person in relation to the activity.

- Reference to illness, addiction and mental health problems should not be in the definition.
- Some counsellors think it would be useful to have separate definitions for pathological and problem gambling.
- Loss of control, compulsion and preoccupation are key aspects of problem gambling.
- Counsellors favour the continuum approach as it is useful for education, to identify 'at-risk' gamblers, and to implement early intervention and more targeted intervention strategies according to where people are on the continuum.
- Counsellors consider it very important that the definition contain reference to both behaviours and harms.
- A definition based on "harm" alone is not a practical definition from the perspective of working with gamblers who have problems to change their behaviours.

Comments on socio-cultural aspects

- The term "problem gambling" cannot be translated into many languages.
- CALD counsellors and service providers do not favour the notion of a single definition.
- CALD counsellors and service providers do favour the continuum approach to problem gambling because of its inclusiveness (*everyone* fits somewhere on the continuum), and because of its usefulness with respect to strategies to address problem gambling from community education for non-gamblers and recreational gamblers, to early intervention strategies for 'at-risk' gamblers, to more targeted intervention strategies for problem and pathological gamblers.
- A national definition should include reference to both behaviours and harms.
- Building prior relationships with most people from ethnic communities and with Indigenous Australians is very important before talking to them about their gambling behaviours and takes time.
- Many persons with CALD backgrounds who have gambling problems don't know how to, or are too scared to access help services.
- Research is "way-underestimating" the prevalence of problem gambling in CALD and Indigenous communities.
- Counselling needs to be culturally and linguistically appropriate for CALD and Indigenous communities.

2. Screens and instruments

Feedback from Victoria

- A single consistent instrument across agencies is likely to be very useful to obtain useful comparative information.
- There is value in being able to use psychometric assessments in counselling.
- Counsellors should receive training in how to administer psychometric instruments.

- Counsellors reported using the SOGS, DSM-IV, CPGI and G-Map, but no standard measure was used across agencies.

Feedback from South Australia

- The SOGS is the predominant measure used by South Australian counselling agencies.
- The SOGS is useful as a tool to track client progress.
- The VGS is used by Flinders Medical Centre (who designed it).
- Instruments need to be tailored to meet the needs of specific cultural communities and consultation should be undertaken to avoid inappropriate questions.

Views from New South Wales

- The SOGS remains the most commonly used measure in NSW counselling agencies, and the DSM-IV the second most widely used.
- The SOGS and DSM-IV were generally seen as useful, but there was a perceived need to develop shorter measures for public health surveys and to supplement these measures with other indicators of community harm.

Views from Queensland

- The CPGI is the preferred measurement tool in Queensland, although no specific measure is mandatory for assessments conducted by problem gambling services.
- The CPGI is considered consistent with the Government's public health approach to gambling and interest in the social effects of problem gambling.
- The CPGI does not avoid the weaknesses of any psychometric instrument; namely, its reliance on self-report and inability to document the broader community-level factors contributing to problem gambling.
- There are many perceived advantages to using a two-part approach to measuring problem gambling, ie., where problematic behaviour and the harms associated with the behaviour are separated. However, it may be difficult to develop any objective measure of gambling-related harm.

Views from Tasmania

- SOGS is the most widely used measure in Tasmania for both population surveys and the assessment of gamblers by counselling agencies.
- Measures based on harm alone were seen as too subjective and therefore problematic.
- A measure reliant only on behaviour is also undesirable because some people have the capacity to expend considerable time and effort on gambling without incurring any significant harms.
- A two-part survey that defines gambling either in terms of harm, behaviour, or both would be preferred.

View from Western Australia

- The SOGS is the most widely used assessment tool in Western Australian counselling agencies.
- It has therapeutic value and allows international comparisons (although not with current Canadian research- Authors).
- The SOGS may not be entirely suitable for use in Indigenous communities.

Call for Comments

Definitions of problem gambling and gambling-related harm

Q.1 Should a national definition of problem gambling contain reference to any or all of the following:

- addiction, illness or mental health problems;
- loss of control;
- a preoccupation with gambling;
- spending beyond one's means;
- problem gambling residing on a continuum of gambling behaviours; and
- adverse impacts upon the gamblers' personal life, family relationships, vocational pursuits, and the wider community?

Q.2 From your professional perspective, which of the above elements of problem gambling most closely reflects your experiences with dealing with problem gamblers? Would incorporation of these elements into a national definition of problem gambling help you in your work with problem gamblers? How?

Q.3 Is the concept of gambling-related harm too vague to be of any practical use?

Q.4 A national definition of problem gambling that meets the needs of all stakeholders and so can be used for diagnosis, objective measurement, replication, research, service provision and public policy planning in a diverse range of contexts will probably need to be referenced to both individual gambling behaviours and to harms. Whilst no single definition is likely to suit all purposes, do you think a definition along the lines of the following would be suitable as a national definition in the Australian context? Why or why not?

> *"Problem gambling is characterised by a preoccupation with gambling which leads to a continuous or periodic loss of control over time and/or money spent on gambling resulting in adverse impacts for the gambler, and perhaps for his or her family, his or her vocational pursuits and which may extend into the wider community".*

Measures of problem gambling

For service providers / counsellors and other practical users of gambling measures

Q.1 What measure or measures are you currently using to identify whether your client has a gambling problem?

Q.2 What are the best and worst features of the measure(s) you are using?

Q.3 Thinking about the measures you are using now: What items or questions do you think are the best indicators that a person has a problem? AND Which ones are least helpful?

Q.4 What general aspects of problem gambling are left out of current gambling assessments, and should be included?

Q.5 Are there any items that are not appropriate for women, for people of different ages, or for people from other cultural backgrounds (e.g., Indigenous)? What aspects of their gambling are not being captured by existing measures?

Q.6 Is problem gambling best measured by looking at the problems caused by gambling (e.g., legal, financial) or by looking at behaviours (e.g., chasing losses)?

Q.7 Would it be useful to design a measure that classifies problem gamblers using a 2-part survey: one part that looks at problematic behaviour and another that looks at the consequences of the behaviour?

1. Introduction

> "Terms to describe behaviours … have an influence on how those behaviours are defined and viewed. Understanding the extent and nature of pathological gambling, as well as its economic and social impact, requires as clear a definition as possible. A discrete, acceptable, and useful definition of pathological gambling would be based on a nomenclature applicable in a wide diversity of contexts (American Psychiatric Association, 1994). … A nomenclature inclusive of pathological gambling must be suitable for use in scholarly research, clinical diagnosis and treatment, and community and other social contexts. The nomenclature must also reflect a variety of perspectives because research scientists, psychiatrists, other treatment care clinicians, and public policy makers tend to frame questions about gambling differently, depending on their disciplinary training, experience and special interests. In the absence of an agreed-upon nomenclature, these and other groups interested in gambling and gambling problems have developed different paradigms or world views from which to consider these matters."[1]

> "Definitions are not simply labels that aid communication; they also influence the very perception of the issues and the way in which they can be measured and evaluated."[2]

The Ministerial Council on Gambling has nominated seven national research priorities for gambling research. The National Gambling Research Working Party, supported by a Gambling Research Secretariat, based in the Victorian Department of Justice oversees the national gambling research agenda.

This report has been prepared in response to the first of the seven national research priorities: *National definitions of problem gambling and consistent data collection*. The purpose of the project is to inform the Working Party so that it can make a decision about the definitions of problem gambling that best suit its ongoing research program and to assist jurisdictions in making policy decisions about the most appropriate definitions for their specific circumstances and policy preference.

The first task was to undertake a literature review of definitions of problem gambling, gambling-related harm and gambling measurement instruments across all relevant disciplines including, but not limited to, gambling studies, public health, epidemiology, psychology, geography, economics, anthropology and psychiatry. The review takes into account what is gambling, cultural mores, types of gambling, data collection practices and implications for recorded outcomes. It also explicitly identifies the weaknesses and strengths of definitions of problem gambling and gambling-related harm across various approaches to problem gambling and also reviews the strengths and weaknesses of a variety of gambling screens and instruments.

Searches for published journal articles pertinent to definitions of problem gambling since 1980 were conducted using a variety of gambling related terms (problem gambling, pathological gambling, compulsive gambling, excessive gambling, disorderly gambling, gambling addiction, heavy gambling, gambling dependence and in some cases just using 'gambling') of a number of electronic databases including EBSCOhost, PubMed (which includes MedLine), PsycInfo (formerly PsychLit), SocioFile, SCIRUS, EconLit, ECONbase and Informit Online.

The literature search of published journal articles was supplemented with an Internet search for other documents (mostly reports) including those of government and non-profit agencies responsible for problem gambling treatment, gambling research, replication and policy both in

[1] National Research Council , 1999.
[2] Dickerson et al., 1997, p. 11.

Australia and overseas (particularly in New Zealand, Canada and the United States). The government portals of the Commonwealth Government, and all State and Territory governments in Australia were searched using the term 'gambling'. We also searched the sites of industry stakeholders and service providers. At the beginning of the project we wrote to stakeholders asking for their views and to suggest any material they thought, in particular, should be reviewed. We thank those people who responded to our request and we have followed up any suggestions that were made.

The second task was to obtain feedback on material developed in the literature review.

The literature review was intended to inform stakeholders and act as a stimulus to discussion of its findings which included the following:

- a plethora of terms exist to describe problem gambling;
- there are many definitions of problem gambling but these can be categorised according to their characterisation of problem gambling, although the categories are not necessarily mutually exclusive;
- none of the many definitions of problem gambling are likely to suit the needs of all stakeholders in the Australian context;
- any definition to suit the needs of most stakeholders will need to be referenced to both individual behaviours and to harms;
- current definitions of gambling-related harm so lack precision that is almost impossible to make them operational; but
- the notion of harm is so subjective that it may be almost impossible to improve on the current definitions.

This paper also summarises the findings with respect to the properties, strengths and weaknesses of most of the screens and instruments currently used to measure problem gambling. The approach taken to review the literature on the measurement of problem gambling is outlined in detail in Chapter 7.

SOGS was found to be the most widely used measure in the world and has been used across all contexts: clinical assessment, prevalence and research studies. The SOGS is considered an acceptable measure for research purposes.

Clinical assessment tends to involve the DSM-IV as the first choice.

The choice of measure for prevalence research depends upon the country. Canada clearly now favours the CPGI, North America favours the SOGS and the NODS (psychometric version of the DSM-IV classification), whereas Australian researchers may be shifting towards using the CPGI or a combination of SOGS and CPGI to ensure comparability with previous Australian studies (McMillen, Marshall, Wenzel and Ahmed, 2004). The DSM-IV is preferred in Europe and Asia.

Feedback obtained in response to the literature review suggested most stakeholders want a national definition of problem gambling and that the definition should contain reference to both individual's gambling behaviours and to gambling-related harms. Some respondents are also of the view that reference to a gambling continuum is desirable.

Most respondents did not want to see reference to mental health, illness or addiction in a definition of problem gambling although some thought it might be useful to have separate definitions for problem gambling and pathological gambling.

People and organisations who responded to the "Call for Comments" were divided as to whether "loss of control" and "preoccupation" should be included in a national definition, some arguing that these are the key aspects which define problem gambling and others arguing that they suggest external forces are responsible for people's gambling behaviours and/or suggest a link to mental health problems.

Most respondents were of the view that a national definition of problem gambling should contain reference to harm; however, on its own it is insufficient to define problem gambling as it does not assist with education and intervention strategies designed to prevent or change problematic behaviours that lead to gambling problems.

On the basis of the feedback that we received, we recommend the following national definition of problem gambling be adopted:

> ***"Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or for the community".***[3]

Reference to "difficulties in limiting money and/or time spent on gambling" implies a continuum of gambling behaviours from those who have no difficulty (including non-gamblers) to those who have extreme difficulty so that no direct reference to a continuum need be incorporated into the definition. Our view is that the proposed definition is shorter and sharper and therefore has more impact (without being any less useful) than a definition which incorporates reference to a continuum.

The general consensus was that there is a need for a consistent measurement tool in Australia for comparison purposes. The CPGI (with refinements to clarify the cut-off points) is the preferred measurement tool for population-level research. The SOGS may also need to be used to allow for comparisons with previous studies. Both the SOGS and DSM-IV are accepted as useful tools for counselling and assessment purposes.

In the short-term, the best option is to continue to use current measures but to combine them with other instruments that capture elements that appear to be missing or inappropriate.

In the longer-term, there are greater opportunities to refine existing measures so that they are better able to capture the critical elements of problem gambling. One possible starting point might be to develop a measure that clearly differentiates between harm and problematic behaviour in two separate subscales. This would be consistent with the above definition of problem gambling.

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[3] One reviewer suggested the words "difficulties in limiting" are problematic in the definition because if a person is not *attempting to* limit money and/or time spent on gambling, they could still be gambling at a level that has negative consequences. Our view is that the words should be retained in the definition as a very important task of the definition is to underpin measuring screens and instruments, most of which do not identify a problem gambler as such unless the gambler endorses items that indicate he or she is having difficulty limiting money and/or time spent on gambling. Screens and instruments do not capture in their measurement those problem gamblers who are in self-denial about their gambling problems. Moreover, most persons who have gambling problems would agree that they have difficulty with limiting the amount of money and/or time spent on gambling.

2. Defining gambling

To define gambling seems to be an uncontroversial exercise. Variations on a similar theme include:

> "… staking of money on the outcome of games or events involving chance or skill" (Slade and McConville, 2003, p. 2);
> "Staking money on uncertain events driven by chance" (Productivity Commission 1999, p. x);
> "… gambling, the act of staking money or some other item of value on the outcome of an event determined by chance" (Blazszcynski, Walker, Sagris and Dickerson, 1999, p. 4);
> "…the exchange of property (usually money but sometimes other property including slaves, ears and fingers) on the outcome of an event largely, if not solely, determined by chance" (Allcock, 2000, p. 253).
> "… wagering money or other belongings on chance activities or events with random or uncertain outcomes" (National Research Council, 1999, p. 16);
> "… the betting or wagering of valuables on events of uncertain outcome" (Devereux, 1979 quoted in Smith and Wynne, 1992, p. 17)

Smith and Wynne (2002, p. 17) notes that implicit in the above definitions of gambling are four assumptions: (1) an element of risk is involved; (2) someone wins and someone loses-money, property or some other items of value change hands; (3) at least two parties must be involved in the activity-a person cannot gamble against him/herself; and (4) gambling is a conscious, deliberate, and voluntary activity". Gambling, by its very nature, involves the voluntary assumption of risk. Risk-taking is reinforced by positive emotional experiences: relief from boredom, feelings of accomplishment, and the "rush" associated with seeking excitement. Those activities with the highest potential pay-offs tend to generate the most excitement and serve to stimulate greater risk-taking activity (NRC, pp. 16-17).

All of the above definitions note that the outcomes of events are determined by chance or skill. What separates those activities that are commonly recognised as gambling activities – gaming (playing games of chance for money and broadly includes all non-wagering gambling activities) and wagering (placing a bet on the outcome of a racing or other event (usually a sporting event) – from other activities where the outcomes are also random and uncertain such as starting a new business or speculating on the stock market is that the application of skill to the latter activity will ensure a higher probability of generating a positive return than the application of skills to those activities that are commonly recognised as gambling activities. 'Genuine gambling must have a greater degree of chance than skill, with the pure form demanding no skill whatsoever' (Slade and McConville, 2003, p. 11); e.g., pushing buttons on electronic gaming machines. Smith and Wynne. (2002, p. 17) differentiate gambling from other activities that involve the assumption of risk by arguing that the former are games designed specifically to induce wagering (defined broadly as both gaming and wagering). They are designed to part investors and their money, are presented as a form of entertainment or recreation, are generally recognised as 'gambling', or are defined to be so by statute for taxation and regulatory purposes (Abbott and Volberg, 1999, pp. 17-18).

Korn, Gibbins, and Azmier. (2003, p. 37) argue that traditionally public policy debates on gambling have been viewed through a variety of frames (which are not mutually exclusive). These include seeing gambling as a matter of individual freedom, a recreational or entertainment activity, a major source of public revenue, a tool for economic development through increased tourism and employment, an addiction that should be treated within a medical model, a cultural artefact more deeply embedded in some cultures than others, a way to escape class constraints through increased wealth for some, and a matter for public accountability, public responsibility and public health. These are also the frames through which attention is directed towards problem gamblers.

3. Definitions of problem gambling

In contrast to the seeming agreement over the definition of gambling, definitions of problem gambling are manifold and there is much controversy surrounding the various definitions. Even the terminology used varies – the most common terms 'pathological gambling', 'compulsive gambling' and 'problem gambling' are frequently used interchangeably although the latter is sometimes used, particularly by North Americans, to denote a level of gambling, which is at an earlier stage or which leads to fewer problems than the later stage or more severe problems experienced or caused by those gamblers who are diagnosed by diagnostic tests such as the DSM-IV as compulsive or pathological gamblers (Raylu and Oei, 2002; Moore, 2002; Volberg, 2001; and Rosenthal, 1989). In a recent review, Raylu and Oei (2002, p. 1010) use the term:

> *"[pathological gambling] to define gambling behaviour meeting the diagnostic criteria, but 'problem gambling' to include those individuals that may be experiencing problems but who do not meet the criteria".*

Problem gambling, at least in Australia, is now generally defined in terms of its social impacts. Australian researchers, service providers and legislators have tended to prefer the term 'problem gamblers' for gambling which gives rise to any problems for the individual, his or her family, friends, workplace or the community at large whether or not the problems are severe enough for a person to be labelled using diagnostic criteria as a problem or pathological gambler. The reasons for this are that the term 'problem gambling' is not associated with a particular model of problem gambling - the medical model - as is 'pathological gambling', and also because the term 'pathological' is viewed by some as being a pejorative label. Australian researchers have tended to move way from the view that problem gambling is determined by an underlying pathology or at least they treat it as an open question. However, Amies (1999) and Hing (2003, p. 6) are two Australian researchers who among others, note there have been difficulties with defining problem gambling and that these differences in definition are important because they impact on measures implemented to address the problem.

Definitions of problem gambling tend to fall into one of the following categories:

- as a medical disorder of some sort, generally as a mental health disorder, addiction, or a problem with impaired control (for which all three there is mixed evidence with respect to an underlying "pathology" where pathology is defined as in the dictionary as "the branch of medicine concerned with the cause, origin and nature of disease, including the changes occurring as a result of disease");
- as an economic problem;
- as lying on a continuum of gambling behaviour;
- in terms of harm to the individual gambler and to others; and
- as a social construct.

However, these categories are not mutually exclusive. For example, one could look at the development of problem gambling using a continuum model and in reference to problematic behaviours. A national definition of problem gambling that meets the needs of all stakeholders in a diverse range of contexts will probably need to be referenced to both individual gambling behaviours and to harms and so may draw on several of the following conceptualisations of problem gambling.

In response to arguments over what lies behind the development of problem gambling, and in keeping with the public policy focus of assisting problem gamblers with their problems, no matter how their problems come about, there has been a shift in definitions of problem gambling away from those that focus on problem gambling as a form of medical problem/mental disorder to definitions that favour defining problem gambling in terms of the harmful consequences that flow once a person has become a problem gambler. Some broader definitions incorporate both "medical" and "harm" aspects of problem gambling.

To date there have been several key reviews that critically review definitions of problem gambling. These include the following: Lesieur and Rosenthal (1991), Walker (1992), AIGR, Dickerson, McMillen and Hallebone et al, (1997), Wildman (1998), Ferris, Wynne and Single, (1999), Productivity Commission (1999), National Research Council (NRC, 1999) and Thomas, Jackson and Blaszczynski (2003). The following report draws heavily on these previous reviews.

Dickerson, McMillen and Hallebone et al, (1997), in a report by the Australian Institute of Gambling Research (AIGR), focused on definitions used by professional psychologists and psychiatrists, in particular. The report discussed definitions of problem gambling as a mental disorder (section 2.2), as an addiction and excessive behaviour or impaired control disorder (sections 2.3 and 2.4) and other definitions of problem gambling that were mostly concerned with harms (section 2.5). The AIGR report led to a widely accepted view in Australia that the definition of problem gambling should be focussed on gambling-related harm. The Productivity Commission favoured definitions focussed around a continuum of gambling behaviours. As early as 1991 Lesieur and Rosenthal noted a trend towards an eclectic approach to pathological gambling taking account of sociological, psychological and biological processes.

More recent reviews of the international pathological gambling literature have also suggested that perhaps problem gambling is better characterised as a complex interaction of biobehavioural, psychological and social and environmental factors than characterised purely with reference to medical or mental health problems (Goudriaan, Oosterlaan, De Beurs and van den Brink, 2002; Raylu and Oei, 2002; and Volberg, 2002) although, as yet, there are no theoretical models that encompass all these aspects of problem gambling. Clinicians, psychologists and psychiatrists tend to focus on individual behaviours and so prefer definitions based on the medical disorder/mental health problem frameworks where problem gambling can be defined with reference to diagnostic criteria. Other researchers, governments and service providers tend to be of the view that environmental and social factors are important determinants of problem gambling and so favour definitions that see gambling as a continuum, where gambling is defined as problematic if it gives rise to harms, not with reference to diagnostic criteria.

Volberg (2001, p. A-8) points to the difficulties for assessing problem gambling in the future because of the wide range of stakeholders:

> *"Policy makers, government agencies, gambling regulators and gaming operators are concerned about the likely impacts of changing mixes of legal gambling on the gambling behaviour of broad segments of the population as well as on the prevalence of gambling-related difficulties. Public health researchers and social scientists are concerned with minimizing the risks of legal gambling to particular subgroups in the population. Economists, financial institutions and law enforcement professionals are concerned about the relationship between legal gambling and bankruptcies, gambling and crime, and the reliance of the gaming industries on problem gamblers for revenues. Treatment professionals, government agencies and not-for-profit organizations are concerned about*

> *how to allocate scarce resources for the prevention and treatment of gambling problems (Volberg (1998)). Finally, groups exposed to the expansion of legal gambling have started working to prevent the further expansion of legal gambling or to repeal existing activities".*

A single definition of problem gambling that meets the requirements of all the above stakeholders may be difficult to achieve. In the future, as in the past, stakeholders will most probably favour definitions that focus on the nature of their individual professional interactions with problem gamblers, using whichever definition is of most practical use.

The current review adopts a similar approach to that of Dickerson, McMillen, Hallebone et al. (1997), Ferris, Wynne and Single (1997), NRC (1999) and the United States National Research Council (1999) in discussion of definitions of problem gambling by category. However, the current review is more wide-ranging in scope than earlier reviews as it discusses a range of definitions under each category and there is more extensive discussion of the strengths and weaknesses of the definitions by category. This study also reviews the concept of gambling related harm perhaps more extensively than has previously been done.

3.1 Problem gambling as a medical disorder / mental health problem

The terms, 'pathological', 'addictive' and 'compulsive' have tended to be used to describe 'problem' gambling behaviour by those who view problem gambling as a mental health problem (Hing, 2000, p. 94). From the viewpoint of those with this perspective the problems originate with some underlying pathology of the individual. Compulsive gambling is seen as a disease, a medical pathology that needs to be addressed (Ferris, Wynne and Single, 1999, p. 3.2.2). Walker (1992, p. 172) suggests that the pathology approach implies that there is an identifiably separate group of gamblers who are different from other gamblers.

Rosecrance (1985-86, p. 1733 quoted in Ferris, Wynne and Single, 1999, p. 3.2.2) summarises the major components of the disease model as:

1. "There is a single phenomenon that can be called compulsive gambling.
2. Compulsive gamblers are qualitatively different from other gamblers.
3. Compulsive gamblers gradually lose control, and are eventually unable to stop gambling.
4. Compulsive gambling is a progressive condition, and one with an inexorable progression through well-defined stages:
   (a) Initial success, usually characterized by a "big score", that leads to unrealistic expectations of future winnings, and so to an increase in gambling activity.
   (b) With increased gambling activity, there is less success, and a progressive loss of financial resources. The gambler believes that only more gambling can improve the financial picture.
   (c) There is an increasing need to increase gambling, to be in "action" that is driven by an irrational optimism about winning, until the need to gamble becomes an all-consuming compulsion.
   (d) Money becomes simply a means to gamble, rather than an end in itself.
   (e) The gambler begins to suffer psychological distress, as unresolved feelings of guilt keep the gambler gambling.

(f) The gambler begins to chase "losses", which means that he/she returns to gambling to win back money that was lost gambling. At this stage the gambler will do almost anything for money for gambling, including illegal activities such as theft, fraud or embezzlement.

(g) Bouts of guilt and self-castigation result in attempts at abstinence, which are followed by a rationalization period, and then by another round of betting. Gambling is no longer a pleasure, but rather a compulsion, undertaken in a frantic, even ritualistic manner.

(h) The gambler hits rock bottom. All funding avenues have been exhausted, and rationalization is no longer possible. The individual finally acknowledges that any further gambling would be catastrophic.

5. Compulsive gambling is a permanent and irreversible condition. The only cure is total abstinence. If the gambler were to resume gambling, all of the "symptoms" described above would manifest once again."

The disease view of problem gambling is reflected in the Gamblers Anonymous definition:

> *"Compulsive gambling is an illness, progressive in nature, which can never be cured, but can be arrested."*[4]

Other definitions below that derive from the medical model also tend to focus on the progressive nature of the "disease", a psychologically uncontrollable preoccupation with gambling and pathological gambling as an impulse control disorder that ultimately disrupts personal relationships, family life and vocational pursuits.

Ferris, Wynne and Single (1999) suggest that the medical or disease model is arguably the dominant paradigm in North America at the moment possibly because psychologists and psychiatrists have tended to dominate the problem gambling discourse there. This may also be due, in part, to the system of health insurance where a diagnosis of pathological gambling may be required in order that health insurance can be used for treatment costs. Many of the definitions in the medical disorder/mental health category focus on the individual being unable to control his/her impulse to gamble. From 1980, psychology and psychiatry increasingly diagnosed problem gambling as an addiction but the 1994 DSM-IV definition, currently used to define pathological gambling in the United States, was to move the focus from addiction to loss of control as the central experience (Walker, 1996, p. 239; Hing, 2000, p. 97).

Viewing problem gambling as a medical disorder/mental health problem largely arose out of the work of Robert Custer who defined compulsive gambling as (APA 1980):

> *"… an addictive illness in which the subject is driven by an overwhelming, uncontrollable impulse to gamble".*

Custer's work led to the inclusion of compulsive gambling as a new mental disorder in the American Psychiatric Association *Diagnostic and Statistical Manual of Mental Disorders III* (APA DSM-III) in 1980 which characterised compulsive gambling as:

> *"… a progressive disorder in which an individual has a psychologically uncontrollable preoccupation and urge to gamble. This results in excessive gambling, the outcome of*

[4] Rossol , 2001, p. 326 quoting Gamblers Anonymous *Yellow Book*.

> *which compromises, disrupts or destroys the gambler's personal life, family relationships or vocational pursuits. The problems in turn lead to intensification of the gambling behaviour. The cardinal features are emotional dependence on gambling, loss of control and interference with normal functioning".*

Custer's background was as a psychiatrist in treating alcoholics and this background influenced his perceptions of problem gambling as did his primary source of information who were clients of Gamblers' Anonymous, since shown to be unrepresentative of problem gamblers in the general population (Dickerson, McMillen and Hallebone et al., 1997, pp. 12-13).

In 1984 the DSM-III criteria were revised so that DSM-IIIR reflected a view of pathological gambling as similar to other addictions especially substance dependence (Lesieur and Custer, 1984). Jacobs (1986, p. 18) refers to the Standard Medical Dictionary (Dorland, 1974) definition of addiction as "the state of being given up to some habit, especially strong dependence on a drug" but Jacobs draws on Cummings (1979) to emphasise his view that it is habit that is central to addiction rather than ingestion of a substance. Although problem gamblers display symptoms that are similar to those with other addictions such as alcohol and drug dependence, problem gambling seems not itself to be physiologically addicting. Characterising the problem gambler as an "addict" is thus based on a characterisation of gambling behaviours such as preoccupation with gambling, gambling longer and with more money than intended, increasing tolerance to larger bets or longer odds in order to create the desired excitement, and frequent unsuccessful attempts to cut down or quit (Lesieur, 1992, p. 2) without attempting to draw aetological hypotheses about the origins of those behaviours (Ben-Tovim, Esterman and Tolchard et al., 2001, p. 12). Rather, pathological gambling has been regarded as a behavioural or non-clinical addiction (Goudriaan, Oosterlan, de Beurs and van den Brink, p. 124).

Tattersall's (Submission 156, p. 6 to the Productivity Commission Review, 1999) also described problem gambling in relation to the behavioural characteristics similar to those of an addict. The Productivity Commission (1999, p. 6.3) listed the following Tattersall's definition among a list of definitions of problem gambling:

> *"Preparedness to spend heavily, combined with frequent participation, implies that some gambling activities are strongly desired, and potentially habit forming. If the habit can become so strong it leads to serious social consequences, then that is grounds for community concern about the regulation of gambling, and the measures in place to deal with its consequences."*

By 1994, the DSM-IV definition had evolved to one that both reflected a desire to provide guidance in clinically diagnosing pathological gambling (NRC, 1999, p. 27) and one where the focus was on loss or impairment of control as the central experience (Dickerson, McMillen and Hallebone et al., 1997, p. 26) where the essential feature of an impulse control disorder is "the failure to resist an impulse, drive or temptation to perform an act that is harmful to the person or others" (APA, 1994, p. 609). Equating problem gambling with loss of control relates in part to the underlying notion of an addictive personality (Blaszczynski, Wilson and McConaghy, 1986, quoted in Ben-Tovim, Esterman, Tolchard and Battersby, 2001, p. 12). The updated DSM-IV (1994) included a diagnosis of pathological gambling within the section "Impulse Control Disorders not elsewhere classified" where it is defined as (as cited in Dickerson, McMillen and Hallebone et al., 1997, p. 13):

> *"persistent and recurrent maladaptive gambling behaviour that disrupts personal, family, or vocational pursuits".*

Persistent, maladaptive gambling is expressed by five or more of the following. The patient:

- Is preoccupied with gambling (relives past experiences, plans new ventures, or devises ways to obtain seed money).
- Needs to put increasing amounts of money in to get the wished for excitement.
- Has repeatedly tried (and failed) to control or stop gambling.
- Feels restless or irritable when trying to control gambling.
- Uses gambling to escape from problems or to cope with dysphoric mood (such as anxiety, depression, guilt, helplessness).
- Often tries to recoup losses ("chasing losses").
- Lies to cover up extent of gambling
- Has stolen (embezzlement, forgery, fraud, theft) to finance gambling.
- Has jeopardized a job, important relationship, or opportunity for career or education by gambling.
- Has had to rely on others for money to relieve the consequences of gambling.

A Manic Episode does not better explain this behaviour.

The ten criteria represent three dimensions of behaviour: damage or disruption, loss of control and dependence (NRC, 1999, p. 27). The diagnosis is determined using the diagnostic criteria in interview between the client and a professional mental health worker (Dickerson, McMillen and Hallebone et al., 1997, p. 13).

As noted above, either the DSM-IV definition or other very similar definitions tend to be those definitions that are currently used in the United States. NRC (1999, pp. 20-21) in its critical review of pathological gambling notes that there is widespread support [at least in the United States and in the research literature] for pathological gambling or Level 3 gambling defined as:

> *"[a] mental disorder characterized by a continuous or periodic loss of control over gambling, a preoccupation with gambling and with obtaining money with which to gamble, irrational thinking, and a continuation of the behaviour despite adverse consequences".*

As to be discussed in later sections of this report, Australian researchers and service providers have tended to reject definitions of problem gambling such as this that contain reference to mental health, addiction or disease for several reasons: insufficient evidence for underlying etiology and absence of reference to a contextual basis in diagnosing problem gambling.

A number of the medical disorder/mental health problem definitions emphasise the supposedly progressive nature of problem or pathological gambling. Letson (2000, quoted in Zapelli, 2003, p. 17) distinguished problem from pathological gambling with the latter being defined as:

> *"a progressive disorder in which an individual has a psychologically uncontrollable preoccupation with and urge to gamble, resulting in damage to vocational, family and social interests. It is characterised by a chronic and progressive inability to resist the impulse to gamble".*

The Nevada Council on Problem Gambling (2004) defines problem gambling as:

> *"… a progressive behavioural disorder in which an individual has a psychologically uncontrollable preoccupation and urge to gamble. This results in excessive gambling, the outcome of which is the loss of money, time and self-esteem. The gambling reaches a point at which it compromises, disrupts and ultimately destroys the gambler's personal life, family relationships, and vocational pursuits. These problems in turn lead to intensification of the gambling behaviour. The principal features are emotional dependence on gambling, loss of control and interference with normal functioning".*

Similarly, the National Council on Problem Gambling in the United States (2004) defines problem and pathological gambling as follows:

> *"Problem gambling is gambling behavior which causes disruptions in any major area of life: psychological, physical, social or vocational. The term "Problem Gambling" includes, but is not limited to, the condition known as "Pathological", or "Compulsive" Gambling, a progressive addiction characterized by increasing preoccupation with gambling, a need to bet more money more frequently, restlessness or irritability when attempting to stop, "chasing" losses, and loss of control manifested by continuation of the gambling behavior in spite of mounting, serious, negative consequences".*

The above definitions suggest linear progression with respect to gambling problems from less disorderly to more disorderly gambling. Although linear progression may be a fair characterisation of the behaviour of a large number of problem gamblers, Shaffer and Hall (1996) argue that few studies have considered the potential for movement away from problematic gambling behaviour so that there is little actual evidence of linear progression. Furthermore, the above definitions also focus on preoccupation with gambling, and totally discount the fact that, for some people, episodic bouts of gambling, rather than uncontrolled gambling can lead to those people either identifying themselves or being identified by others as problem gamblers.

Many Australian definitions also focus on loss of control as the central feature. One such definition is that of AIGR (1995, p. 111) quoted in Doley (2000, p. 4):

> *"…problematic gambling [is] … gambling that is frequent, is at times uncontrolled and has resulted in some harmful effects".*

The Productivity Commission (1999, p. 6.3) lists some other definitions pertaining to loss of control:

> *"Problem gambling may be characterised by a loss of control over gambling, especially over the scope and frequency of gambling, the level of wagering and the amount of leisure time devoted to gambling, and the negative consequences deriving from this loss of control"* (Select Committee on Gambling , ACT, 1999, p. 12 based on Hraba and Lee, 1996);
>
> *"We define "problem gambling" as gambling behaviour over which the person does NOT have control or which the person finds very hard to control and which contributes to personal, economic and social problems for the individual and family"* (Mental Health Association of Australia, Submission 51 to the Productivity Commission inquiry, p. 4); and
>
> *"… we will use 'pathological' and 'compulsive' gambling in an equivalent sense to describe gamblers who display clear signs of loss of control. 'Problem' gambling is used to refer to the wider group of people who show some but not all signs of developing that condition"* (Blaszczynski 1998b, p. 13).

The ACT Select Committee on Gambling (1999, p. 12) quoted in the Department of Family and Community Services (2002, p. 14) also characterises problem gambling as a loss of control over gambling; its scope, frequency, level of wagering, amount of time devoted to gambling and its negative consequences. The ACT Gambling and Racing Commission (2004, p. 1) implicitly recognises problem gambling as an impulse control disorder:

> *"Problem gambling is characterised by a strong pull or compulsion towards gambling which becomes more and more difficult to resist. People describe this as the urge to gamble and say that despite all the logical arguments they have against gambling, this urge will not go away until it is satisfied (by gambling)".*

In contrast to the US definitions, the Australian definitions do not treat problem gambling in linear fashion, nor do they focus on preoccupation with gambling, but similarly to the US definitions they do incorporate the notion that problem gambling is problematic because of the adverse consequences that arise from a person's gambling behaviour.

The Productivity Commission itself (quoted in Drabsch 2003, p. 3) described problem gambling as generally involving:

- *A lack of control by the gambler over his/her gambling behaviour; and/or*
- *Adverse personal, economic and social impacts which result from a gambler's actions – particularly the financial losses relative to the gambler's means.*

However, the Productivity Commission largely regarded problem gambling behaviour as lying on a *continuum* of gambling behaviour stretching from where gambling gives no rise to adverse impacts to where the behaviour leads to very severe adverse consequences for the gambler, his or her family and the community. The continuum approach (to be discussed separately below) removes the focus with respect to problem gambling from the individual to society and so does not truly fit in with the medical approach with its focus on the underlying pathology of the individual gambler.

3.1.1 Support for the medical disorder / mental health approach

Blume (1987) is a strong advocate of the "medical model" of compulsive gambling because it allows the conceptualisation, organisation and delivery of assistance to individuals, their families and to the community, and a framework for prevention and diagnosis against symptoms of a clinically recognised syndrome. She is of the view that only after diagnosis has been established should gender, ethnicity and environmental factors be taken into account in determining appropriate treatment. Blume sees the "medicalisation" of gambling as a positive development because the model does not hold the problem gambler responsible for contracting the disease but allows him/her to be labelled as "sick" once he/she has sought assistance. The problem gambler can thus work towards recovery without bearing the burden of excessive guilt.

Svensen (undated) draws on the report by Ferris, Wynne and Single (1999) to note that the medical model has widespread support among psychiatrists, gambling self-help groups, the gambling industry and individuals with gambling problems. The Productivity Commission Report (1999, p. 6.6) notes Walker's (1998) concern that if problem gambling is not seen as an illness, services tend to be directed towards counselling rather than therapies for control disorders. This is also of concern to the New Zealand Committee on Problem Gambling Management which, following reference to the number of suicides amongst problem gamblers, stated: "… we see this disorder as fitting within mental health services where trained and registered clinicians working to best practice diagnostic standards are predominantly involved" (quoted in Productivity Commission 1999, p. 6.7).

In 1999, the Committee on the Social and Economic Impact of Pathological Gambling and Committee on Law and Justice in the United States undertook a critical review of pathological

gambling (NRC, 1999). They summarised the advantages and the disadvantages of the DSM-IV definition:

> *"The current description of pathological gambling in DSM-IV has been found to characterize pathological gambling in relatively precise operational terms; to provide the basis for measures that are reliable, replicable, and sensitive to regional and local variation; to distinguish gambling behaviour from other impulse disorders; and to suggest the utility of applying specific types of clinical treatments (Shaffer et al., 1994). Moreover, the DSM-IV criteria have appeared to work well for clinicians for the past five years. However, because it is a clinical description with little empirical support beyond treatment populations, there are still problems with its use to define the nature and origins of pathological gambling, and when trying to estimate prevalence" .*

Dickerson (2003, p. 4) suggests that it is difficult to know on what basis the claim that the DSM-IV criteria has worked well for clinicians is being made as there have been no published studies that evaluate the reliability or validity of the diagnostic criteria when used in clinical assessment.

3.1.2 Weaknesses of the medical disorder / mental health approach

Blaszczynski and Nower (2002, p. 488) also define problem gambling with reference to impaired control and a disordered or diseased state:

> *'… the defining feature of a problem gambler is not only the emergence of negative consequences but also the presence of a subjective sense of impaired control, construed as a disordered or diseased state that deviates from normal, healthy behaviour. Impaired behavioural control, defined by repeated, unsuccessful attempts to resist the urge in the context of a genuine desire to cease, is the central, diagnostic and foundational feature of pathological gambling".*

Nevertheless, Blaszczynski and Nower are critical of a simplistic view of viewing problem gambling merely as an addiction or impulse control disorder. They argue that the quest to impose one theoretical model is misguided as problem gamblers are not a homogeneous group; rather there are three distinct pathways to problem gambling or three distinct sub-groups of problem gamblers: behaviourally conditioned problem gamblers, emotionally vulnerable problem gamblers, and antisocial, impulsivist problem gamblers. Problem gambling is (Blaszczynski and Nower 2002, p. 495) "… the end result of a complex interaction of genetic, biological, psychological and environmental factors. Simple consideration of gambling as an addiction or as a compulsive or impulse control disorder is too limiting in scope."

Rather than ignoring that some gambling problems may arise from mental health problems particular to the individual some other authors also now advocate a biopsychosocial approach to problem gambling which recognises that there are a multiplicity of forces underpinning the behaviour of the problem gambler: the biochemistry of the individual, psychological aspects of the individual's functioning, and the cultural and social forces shaping behaviour (Griffiths, 1996; O'Connor, Ashenden, Raven et al., 1999, p. 3; Sharpe, 2002; Raylu and Oei, 2002; Shaffer and Kidman, 2003; and Griffiths and Delfabbro, 2004). However, as Raylu and Oei (2002, p. 1044) note, there is no theoretical model comprehensive enough to encompass all these aspects.

The pathways model should be useful to clinicians in separating subgroups of problem gamblers that require different management strategies (Blaszczynski and Nower, 2002; Goudriaan, Oosterlaan, de Beurs and van den Brink, 2004) but could also help delineate

subgroups of pathological gamblers in terms of their biobehavioural vulnerabilities (Goudriaan Oosterlaan, de Beurs and van den Brink, 2004). The latter paper also suggests that Sharpe's (2002) distinction between subgroups of gamblers in preferring different kinds of gambling activity could be useful: those favouring horse races and casinos tend to be seeking higher states of arousal whereas gamblers playing electronic gaming machines are generally seeking escape from a dysphoric mood.

Toce-Gerstein, Gerstein and Volberg (2003) set out to help refine the definition and diagnosis of gambling disorders by investigating the distribution among United States gamblers of the 10 DSM-IV criteria for Pathological Gambling. Their conclusion was "[d]ependence in a biobehavioural sense appears to be a hallmark of Pathological Gambling, but it marks only one threshold in a qualitative hierarchy of disorders beginning with a common subclinical behaviour, 'chasing'. Withdrawal and Loss of Control, along with Tolerance, appear to play important, interrelated roles in Pathological Gambling" (Toce-Gerstein, Gerstein and Volberg, 2003, p. 1669). This finding adds an important dimension to Blaszczynski and Nower's (2002) characterisation of pathological gambling as impaired behavioural control.

Referring to many different studies, Toce-Gerstein, Gerstein and Volberg canvass different approaches to pathological gambling. They find widespread acceptance of the DSM-IV definition in many countries where legalised gambling exists, but nonetheless there remains a longstanding debate as to whether gambling disorders comprise a single, sharply distinguished pathological entity or lie on a continuum, and a third approach: that gambling problems comprise a hierarchy of logically related but qualitatively different disorders. The DSM-IV definition does not adequately serve the need to describe individuals who have not been diagnosed as pathological gamblers but nevertheless are experiencing adverse consequences as a result of their gambling behaviours (NRC, 1999, p. 23). The term "problem gambling" in the literature pertaining to the medical model often characterises those gamblers who meet less than five of the DSM-IV criteria (Lesieur and Rosenthal, 1998).

Law (1997, p. 59) is particularly critical of the DSM-IV criteria for diagnosing pathological gambling: "… the presence and identification of a behaviour that constitutes a significant problem is neither *prima facie* evidence nor proof of the existence of pathology. These are not the same thing. … the only basis on which these behaviours (which are without a biological etiology) are deemed to constitute a pathology is their presence in the DSM-IV…".

Blaszczynski, Walker, Sagris and Dickerson (1999, p.11) argue that to date there is no strong evidence in favour of the categorical disease model (the only consistent pattern of behaviour that separates subgroups of gamblers is that they spend more time and money gambling, and thus have more problems); and that categorising problem gambling as an addiction is also inappropriate as gambling does not involve the ingestion of a substance as would be required by a strict interpretation of addiction. Law (1997, pp. 57-58) emphasises this point: Addiction has four essential elements: chemical substance, withdrawal leads to distressing physiological effects, fix leads to alleviation of distress and addiction when a person is unable to cope without the substance. Nevertheless, "[t]he inability to prove a biological etiology has not, however, deterred the psychiatric system from confidently defining 'pathological gambling' as a psychiatric condition". Law also argues that describing problem gambling as an addiction separates a person from having a sense of control over their behaviour which leads to reliance on outsiders to intervene to resolve or manage the problem.

Some authors are critical of the medical model of problem gambling because a psychiatric diagnosis of 'pathological' or 'compulsive gambling' '…fosters a medical dichotomy of

either being subject to a condition (e.g. 'pathological gambling') or being free of the 'disorder'' (O'Connor, Ashenden and Raven et al., 1999, p. vi). These authors tend to favour approaches which regard gambling as a continuum which is inclusive of the whole population of gamblers from those who have no gambling-related problems to problem and pathological gamblers who exhibit increasingly extreme gambling behaviours and gambling-related harms. However, there is no clearly delineated cut-off point on the continuum that defines a person as a problem or pathological gambler. This will be determined by context. Definitions related to the continuum approach are discussed separately below.

Dickerson, McMillen and Hallebone et al. (1997) find, based on Wakefield's criticism of the criteria for Substance Abuse, that DSM-IV criteria fails to distinguish true pathological gambling from non-disordered gambling (Dickerson, McMillen and Hallebone et al., 1997, p. 15) and that the mental disorder conceptualisation emphasises preoccupation, excitement and escaping from problems which will be common to many people who would not otherwise be identified as problem gamblers (Dickerson, McMillen and Hallebone et al., 1997, p. 25). Blaszczynski, Sagris and Dickerson (1999, pp. 6-7), in arguing the case for problem gambling to be recognised as largely, but not merely one of financial strain state that "[a] subjective sense of impaired control is not a necessary attribute [of problem gambling]". They do, however, recognise that impaired control may be linked to impulsivity or an inability to delay gratification which, in turn, leads to excessive gambling.

Dickerson, McMillen and Hallebone et al. (1997, pp. 102-104) summarise their critique of definitions of problem gambling as a mental health problem or addiction (impulse control disorder) with particular reference to gambling in the Australian context:

- preoccupation with gambling as a diagnostic criterion is an inadequate basis for a mental health disorder in the Australian context;
- the diagnostic criteria are too inclusive leading to an overestimate of prevalence;
- participation in gambling occurs along a continuum;
- classification of a 'problem gambler' may result from the perspective of the spouse rather than the individual which is contrary to the intent that symptoms of a mental disorder should not be due to conflict with society;
- whether impacts are problematic may be determined by context;
- there is limited research evidence in support of a relationship between harmful impacts and the inability to control expenditure of time and money on gambling;
- harmful effects might arise from a single session; and
- there is no necessary link between uncontrolled gambling and problems arising from gambling.

Nevertheless, as Abbott and Volberg point out (1997, p. 79), Dickerson, McMillen and Hallebone et al.'s 1997 report does suggest that problem gambling exists as a mental disorder, but that the DSM-IV criteria for diagnosis tends to be over-inclusive in the Australian context, and for this claim they state that Dickerson , McMillen and Hallebone et al. have not put forward convincing empirical evidence.

A number of other authors are also critical of the APA definition. Walker (1996), in a paper referred to by Hing (2000, p. 95) is also critical of the DSM-IV definition as he argues that no pathology has been demonstrated, nor does the condition have the characteristics of classical

neuroses. Similarly, Drabsch (2003, p. 4) notes the criticisms of the APA definition made by the Productivity Commission (1999):

- *"The pattern of behaviours exhibited by problem gamblers do not consistently fit with typical conceptions of a genuine mental illness and 'pathological' gamblers do not appear to suffer a set of clearly defined mental symptoms which suggest a distinctive mental illness.*
- *The mental disease model tends to see problem gambling as a progressive disorder which can only be stemmed through lifetime abstinence rather than as a continuum of problems of varying severity and duration.*
- *It tends to ignore the ways in which the social environment in which gambling takes place affects prevalence rates and harm – promotions, machine design etc.*
- *Gambling has much greater social acceptability in Australia than in the US and a wider spectrum of gambling behaviours are regarded as perfectly normal.*
- *There is a concern that some of the nomenclature customarily used to describe the problem, eg, pathological gambler, may be perceived as pejorative and work against resolution of the problem."*

Slade and McConville (2003, p. 8), economists, are critical of the APA's definition as being almost tautological or, at least, inexact, since failure to resist the impulse to gamble is deemed pathological. They ask "What if we transferred such definitions to other spheres of economic activity?" For example, does the failure to resist the impulse to set up a small business, even when armed with the knowledge that most small businesses fail, render the failed businessman as having some underlying pathology?

Amies (1999) in commenting on Dickerson, McMillen and Hallebone et al.'s 1997 review of research into gambling as a mental disorder, addiction, and as excessive behaviour commented "… the AIGR reported that industry representatives regarded 'the "mental health/addiction" approach … as [being] too rigid and "scientific" to validly define and measure problem gambling'. They considered the definitions of 'pathological' and 'problem' gambling act as a barrier to understanding gambling problems in ethnic communities, and that it may not be valid to have a universal definition". The AIGR concluded that both in the research literature and among stakeholders the DSM-IV definition is contested. Further, it 'is couched in language that is not compatible with Australian attitudes and social perspectives.' The AIGR developed its own harm-based definition of problem gambling (to be discussed below) and Amies (1999) notes that definition takes a pragmatic approach with the potential to encourage preventative and early intervention approaches but leaves open the issue of links with mental health problems.

Tremayne, Masterman-Smith and McMillen (2001) are also of the view that the medical model which draws on the notion of problem gamblers having an underlying pathology that predisposes them to become problem gamblers in the absence of social and cultural context is insufficient. They argue that problem gambling cannot be adequately assessed in a psychological framework. They are critical of the absence of sociological and cultural features in classifying persons as problem gamblers in the medical model. The Queensland Government Department of Corrective Services and Queensland Treasury (2002) are also of the view that a purely psychological framework for assessing problem gambling (using SOGS and DSM-IV, for example) is inadequate because cultural and environmental factors should also be included. For this reason they favour use of the CPGI definition of problem gambling (to be discussed below under definitions that focus on harms) and which they believe to be analogous to that currently used for policy purposes in Queensland.

Another problem with medical models to define problem gambling is that service providers find they do not extend to the treatment of problem gambling. Service providers see problem gambling as a "complex knot of social and structural issues" (GRP, 2003). Problem gamblers themselves are also unlikely to think of their problem gambling behaviours as being related to a mental health problem or medical disorder unless encouraged to do so, for example, by participation in Gamblers Anonymous. Classification as a problem gambler by means of the SOGS, DSM-IV criteria or the Minimum Data Set required by the Department of Human Services in Victoria meant almost nothing to problem gamblers themselves interviewed for the GRP Report. They saw problem gambling in terms of spending beyond their means that subsequently led to a range of adverse consequences for them and others, and it was these consequences that they used to measure the impact and severity of their gambling activity (GRP, 2003, p. 46). Such issues have led to harm-based definitions of problem gambling being adopted in a number of jurisdictions. These definitions are discussed later in this review.

Box 1
Problem Gambling Defined in Terms of a Medical Disorder/Mental Health Problem

Strengths

- Characterises problem gambling in relatively precise, operational terms.
- Diagnosis of problem/pathological gambling is made using objective criteria.
- Does not hold individual responsible for his/her problem gambling behaviours.
- Provides basis for measures that are replicable, reliable and sensitive to regional and local conditions.
- Distinguishes gambling behaviour from other impulse control disorders.
- Has apparently worked well for clinicians.

Weaknesses

- Relatively arbitrary divide distinguishes diagnosis of problem gambling from non-problem gambling behaviour.
- Considering problem gambling as an addiction or impulse control disorder is too limiting in scope.
- Little evidence for underlying pathology.
- Fails to distinguish true pathological gambling from non-disordered gambling.
- Problems with use in estimating prevalence.
- Does not serve needs of those who have gambling related problems but who are not diagnosed as problem gamblers.
- Does not serve needs of service providers in providing treatment.
- Not contextually based.

3.2 Gambling and problem gambling characterised as an economic activity

Very few definitions of problem gambling focus on the economic nature of gambling when in fact the "problems" arising from gambling generally derive from the economic problem of staking "too much" money where "too much" is defined in relation to a person's income, assets or wealth so that the amount expended on gambling causes a gambler to have insufficient monies to be able to meet his or her other required payments and/or debts. Assuming a gambling activity of some sort is accessible, there are two things required to gamble, money (or some other item of value) and time. Dickerson (2003, p. 9) is specific with reference to these issues: "Self-control of gambling is defined as consistently staying within preferred levels of involvement i.e. time and money expenditure." Rosenthal (1989, p. 119) refers to problem gamblers as those who are not diagnosed as pathological or compulsive but

for whom gambling is very important and who may otherwise have many of the behavioural characteristics of pathological gamblers but whose expenditure is controlled: "Money allotted for, and spent on gambling, is well within their means. When they are ahead they do not keep playing until their winnings have been lost, nor do they chase their losses". One of the strongest predictors for gambling problems is the level of expenditure on gambling (Blaszczynski, 1999, p. 10).

A study commissioned by the Victorian Gambling Research Panel (GRP) (New Focus Research, 2003) stated that when gamblers' themselves were asked what constituted problem gambling the majority indicated 'spending beyond your means':

> *'When you spend money you can't afford to spend. I spend more than I intend to. Some people go heaps of times and only spend ten dollars. It depends on other people's income …'*
>
> *'Someone who bets beyond their means. Someone who can't control themselves. The frequency is irrelevant, the money is irrelevant if you go beyond your means …'*

The National Research Council (1999, pp. 20-21) defined excessive gambling as:

> *"reference to an amount of time or money spent gambling that exceeds an arbitrarily defined acceptable level".*

Slade and McConville state (2003, p. 2): "… gambling ought to be understood as an economic activity carried out in specific historical settings, and is, like other such actions, governed by the uncertainties of expenditures and returns". It is surprising that the literature surrounding problem gambling pays so little attention to the economic aspects of gambling. Gamblers, in undertaking any gambling activity, assume risk, and in almost all cases, the returns entail a negative expected value when objectively assessed, even if from the gambler's subjective viewpoint, the expected value is positive.

Financial problems are thus likely to be the key aspect of problem gambling and the key to determining who are problem gamblers and yet surprisingly little attention has been paid to this in the literature on problem gambling. Very simply put, if a person has financial problems and those problems are the consequence of that person's gambling behaviour, then that person is a problem gambler. This is not to say that a gambler may not experience other problems related to the amount of time he/she spends gambling, for example, marital discord or loss of his/her job. These examples derive from the amount of time spent gambling but there are extremely few gamblers who can expend any significant amount of time on gambling activities and not lose substantial amounts of money. In fact, those relatively few gamblers who do spend significant amounts of time and money on gambling, but are successful at it, tend to be categorised as professional gamblers rather than problem gamblers because their gambling behaviours do not result in financial losses.

Conversely, some researchers argue that successful gamblers *can* be diagnosed as pathological gamblers by their behavioural characteristics and that because most pathological gamblers do not seek help before they incur financial losses, does not mean the losses define the disease (Blume, 1987, pp. 240-41; Delfabbro and LeCouteur, 2003, p. 37 with reference to Walker, 1995). This is also an issue for definitions that focus solely on adverse consequences as Delfabbro and LeCouteur (2003, p. 37) recognise: "… it also makes less conceptual sense [than a definition that includes gambling behaviours as well as harms] to talk about a phenomenon (problem-gambling behaviour) solely in terms of something that it is not; namely: interpersonal, vocational and legal problems".

The Ontario Problem Gambling Research Centre (2003) is of the view that the difficulty in developing universally accepted criteria for defining gambling problems (to be discussed later in this report in the section on 'Defining Harm?') is because most gambling problems involve financial duress, which is often defined in relation to a person's disposable income so that 'problems' vary from person to person even where gambling expenditure is the same. A report prepared for the Victorian Casino and Gaming Authority by Cultural Partners Australia Consortium (2000, p. 39) also discusses the issue of financial losses. A person may have all the psychosocial consequences of problem gambling but it is when there are insufficient financial resources to meet the requirements of gambling activities that major problems and consequences develop.

Hing (2000, p. 99 drawing on Dickerson, McMillen and Hallebone et al., 1997, p. 104) notes that harmful effects can arise from even a single session of gambling and yet research focuses on regular or problem gamblers. She believes this reflects a lack of alternate methodologies, perpetuation of methodologies that allow comparisons and the difficulty of discerning the nature and extent of harm in culturally diverse settings.

Yet another strand of the literature, and the approach most often currently adopted in Australia, focuses on the "harms" arising from problem gambling to the gambler, and his/her relationships with family members, friends, work colleagues, and the deleterious impacts it might have on his or her work. Again, as most of the harms are the consequence of financial distress experienced by problem gamblers, it is remarkable that so little attention has been paid to this issue.

Notwithstanding, there has been some recognition of the economic nature of the problem. In particular the Productivity Commission (1999, p. 64) recognises that the key to problem gambling is financial: "The primary, though not only, source of the problem associated with problem gambling is the financial loss … which then has a range of repercussions for the social and personal life of the gambler". Other writers who have acknowledged the key to problem gambling is financial distress include Blaszczynski, Steel and McConaghy (1997, pp. 6-7) also quoted in Thomas, Jackson and Blaszczynski (2003, p. 15):

> *"Excessive gambling is used to describe a level of gambling expenditure that is considered to be higher than can be reasonably afforded relative to the individual's available disposable income and as a result produces financial strain…"*

and Ellis (2000, p. 15):

> *"Problem gamblers (people who have extreme difficulty exercising control over the amounts and frequency with which they gamble)…".*

Lesieur and Custer (1984, p. 149) and Slade and McConville (2003, p. 9) refer to an older paper by Oldman (1978) in which "Oldman concluded that the mechanism by which a gambler reaches crisis point is a consequence not of a personality defect but of a defective relationship between a strategy of play and a way of managing finances. Perhaps, in the end, *so called problem or pathological or compulsive gambling is best seen in an economic context and not as a psychological problem. For, left in the psychological domain, it remains a construction that obscures the real problem – expenditure is raised while incomes are not*" (emphasis added). Slade and McConville (2003, p. 13) also quote Murray (1993) and VCGA (1997) to make the point: "In a research transition … through to the more recent and loose assumptions about problem gambling defined as self-assessed 'harm', the essential economic characteristics of gambling have vanished (Murray 1993, VCGA 1997)".

One route for gambling to bring about adverse consequences is for the gambler to lose too much money relative to his/her earning capacity or wealth. Problem and pathological gamblers have more financial problems than do other gamblers or non-gamblers. Western, Boreham, Johnston and Sleigh (2001, p. 8) state that this finding is almost tautological ("attributing financial problems to gambling determines gambling type" i.e., a person who says he or she has financial problems because of gambling is a problem gambler), and argue that this is exactly the pattern of problems that contributes to other adverse consequences such as family and health problems.

Lesieur (1977) was aware of the problem early on: "Adverse financial consequences tend to drive the clinical picture of pathological gamblers, who often resort to treatment only when they exhaust all their legitimate avenues of income and fear the shadow that illegal income production casts over their future" (quoted in Toce-Gerstein, Gerstein and Volberg, 2003, p. 1669).

The ACT Gambling and Racing Commission (2004, pp. 17-18) also has a focus on the economic consequences of problem gambling. Its definition of a problem gambler is:

> *"… a person has a gambling problem if the person cannot manage properly the person's gambling activities.*"

Signs that a person has a gambling problem include any of the following:

> "1. admitting being unable to stop gambling or to gamble within the person's means
>
> 2 expressing concern about the amount of time or money the person spends on gambling
>
> 3. acknowledging the person spends on gambling money needed for day-to-day living expenses, including for dependants
>
> 4 having a disagreement with a family member or friend about the person's gambling behaviour….

Also, a person is taken to have a gambling problem, if the person engages in any of the following behaviour:

(a) seeking credit for gambling unless authorised under a gaming law;

(b) seeking to borrow or scavenge for money to gamble;

(c) seeking assistance or advice about controlling the person's gambling;

(d) admitting to borrowing or stealing money to gamble".

The New Zealand Department of Internal Affairs (1995, p. 102) also defines problem gambling with an emphasis on the financial aspects although the definition also extends to harm to others as a consequence of the gambler's behaviour:

> *"Problem gambling can be described as occasional or regular gambling to excess to the extent that it leads to problems in other areas of life, particularly with finances and interpersonal relationships. These problems can range from minor ones, involving for example, arguments with the family over gambling expenditure, to problems involving a compulsive addiction to gambling resulting in major financial and interpersonal difficulties."*

Walker (1992, p. 150) refers to the prominence of financial loss in sociocognitive descriptions of problem gambling behaviour: "From the point of view of the sociocognitive theory, the problem gambler is neither sick nor compulsive. There is no pathology, only the damage caused by financial loss. There is no addiction, only false beliefs and irrational thinking."

However, Walker himself (1992, p. 88) is critical of conceptualising gambling as a rational economic activity. Because the expected value of a dollar invested in gambling when measured objectively is less than a dollar (whatever the gambler might think), Walker argues that "whatever the explanation for gambling, it will involve psychological principles rather than economic principles". However, this conception ignores the entertainment and/or recreation value and other forms of utility that the gambler may willingly be prepared to pay for. It assumes that gambling purely takes place in order to make monies and that an increase in utility will only be generated if the gambler receives more than a dollar for each dollar invested. He does seem to address this issue to some extent (Walker 1992, p. 133) by arguing that for the occasional gambler, the entertainment value is the primary motive whereas sociocognitive theory, at least, defines serious gamblers in terms of their commitment to winning. Again, we are back to an economic basis as the rationale for gambling amongst serious gamblers by which Walker seems to mean heavy gamblers, and a person's subjective assessment of expected returns from a dollar invested in gambling need not match the objective reality.

Box 2
Problem Gambling Defined in Terms of an Economic Activity

Strengths

- Gambling problems usually stem from financial problems.

Weaknesses

- Financial losses are only one aspect of problem gambling.
- Insufficient attention paid to psychological aspects of problem gambling.
- Gamblers may display other problem gambling behaviours but not suffer significant financial losses relative to their means.

3.3 Gambling as a continuum

The medical model using diagnostic criteria categorises persons as either being problem or pathological gamblers or not. Other researchers are of the view that either no such categorical distinction exists, or even if it does, it is not very useful from the perspective of intervention. This latter group tends to view gambling as a continuum ranging from social or recreational gambling where there are no adverse impacts for the gambler or others arising from his or her gambling behaviours, through to problem gambling which occurs when gambling leads to adverse consequences for either the individual, other individuals or the community at large, through to pathological gambling which is defined in relation to some diagnostic criteria such as DSM-IV or SOGS. Lesieur and Rosenthal (1991, p. 30) characterise the continuum as including social gamblers at one end and suicide attempters at the other. Petry (2003, p. 1673) is of the view that concordance across instruments suggests that a continuum of gambling may indeed exist.

In an attempt to standardise nomenclature so that conceptually equivalent groups could be compared across studies, Shaffer and Hall (1996) summarised in Shaffer and Hall (1997, p. 21) advocated three levels of disordered gambling: Level 1 which includes both non-problem gamblers and non-gamblers, Level 2 includes gamblers with sub-clinical levels of gambling problems who are experiencing a wide range of adverse consequences (with Level 2 gamblers variously referred to in the literature as 'problem', 'at-risk', 'in-transition' and 'potential

pathological' gamblers) and Level 3 gamblers who meet established diagnostic criteria for pathological gambling. Shaffer and Hall (1997, p. 22) consider that "… gambling pathology likely resides on a continuous rather than a dichotomous dimension" and that there is potential for movement away from pathological gambling as well as towards a greater degree of pathological gambling as is the focus of most studies. Raylu and Oei (2002, p. 1048) suggest that it might be useful if future studies were to adopt Shaffer and Hall's conceptualisation of problem gambling to maintain consistency in the gambling/pathological gambling literature.

Nonetheless, a longstanding debate continues as to whether gambling should be characterised as a continuum (Toce-Gerstein, Gerstein and Volberg, 2003, p. 1662 with reference to Blaszczynski and McConaghy, 1989; Shaffer and Hall, 1996; National Research Council, 1999; Slutske, Eisen, True, Lyons, Goldberg and Tsuang, 2000; and Blaszczynski, 2002). The debate seems, in part, to revolve around the clinicians' necessity for clinical diagnosis versus the service professionals desire to intervene to improve outcomes for those who are causing harms to themselves or to others through their gambling activities whether or not those persons have been clinically diagnosed as problem gamblers. Australian researchers, service providers and public policy professionals today tend to favour the continuum approach to gambling. Thompson, Other-Gee and Penter (2002, p. 72) draw on the work of O'Connor and Jones (1998) to argue that there is a need to avoid dichotomies between problem gambling and social gambling and that problem gambling is essentially a behavioural pattern that will appear in varying degrees and forms with a problem existing if any degree or type of involvement in gambling leads to problems with other aspects of functioning.

Dickerson (1991 quoted in O'Connor, Ashenden and Raven et al., 1999, p. 2) explicitly defined problem gambling in terms of a continuum:

> *"Problem gambling is essentially a behaviour that will present in varying degrees and forms. That is, gambling involvement rests on a continuum from occasional non-problematic use through to extreme over-involvement, with a host of related problems that may be accompanied by a sense of impaired control"*

as did Volberg, Moore, Christiansen, Cummings and Banks' (1998) definition of problem gambling:

> *"Problem gambling is any pattern of gambling behaviour that negatively impacts other important areas of an individual's life, such as relationships, finances or vocation. The mental disorder of "pathological" gambling lies at one end of a broad continuum of problem gambling behaviour …"*

The Productivity Commission (1999, p. 6.1) also characterised problem gambling as a continuum: "… PG is a continuum – with some people having moderate problems and others more severe ones". It also noted (Productivity Commission 1999, p. 6.18) drawing on Shaffer, Hall and Vanderbilt's (1997, pp. ii-iii) categorisation of gamblers on a continuum from those engaged in from Level 1 gambling (no problems) to those engaged in Level 3 gambling behaviour (severe problems) that the threshold for determining that a person is a problem gambler "… depends on *judgements about what levels of severity are policy relevant*" (emphasis in original). However, Shaffer, Hall and Vanderbilt's continuum allows for two-way movement. It is not confined to a progressive worsening of problem gambling behaviours as indicated by the definitions of problem gambling used by those who are adherents to the medical model.

Wenzel, McMillen, Marshall and Ahmed (2004, p. 21) argue that whether problem gambling is measured on a continuum or in terms of categories is a matter of the research purpose of the measurement instrument. They see a benefit in understanding problem gambling as a

continuum which classifies respondents into problem versus non-problem gamblers as an "effective means of simplifying communication about the phenomenon". However, they also recognise that for statements to be made about problem gambling *in absolute terms* requires measurement instruments with categories and definitions of problem gambling; but that these are arbitrary and mere convention as there is no absolute measurement of problem gambling. All diagnoses of problem gambling, however made, are based on "theoretical or implied societal conventions".

Others who have accepted or made use of the continuum approach as outlined by the Productivity Commission include Tremayne, Masterman-Smith and McMillen (2001, p. 68) in a survey of problem gambling for the ACT Gambling and Racing Commission and one of the service providers quoted in a report prepared for the GRP by New Focus Research (2003, p. 48) was also in favour of a continuum approach to problem gambling. Problem gambling was defined as:

> *"[a]ny gambling that causes issues or disturbances in their life whether it is financial, relationship problems etc. It is useful because it allows a continuum of problem gambling, from those who are just starting out because they are bored or lonely to those where it is just an addiction or habit. Clients also prefer not to be seen in black and white terms, that is, they are either a pathological gambler or they are not…"*

Zapelli (2003) in a report for the Western Australian Department of Racing, Gaming and Liquor asked problem gamblers how gambling came to be a problem for them. Responses indicated there was a continuum of problem gambling behaviours and that gamblers themselves referred to a downward "spiral" in their progression to problem gambling. The gamblers indicated that chasing losses, fascination with gambling, increasing the stake, increasing the number and frequency of activities, getting access to increasing amounts of money, lying and feeling ashamed all indicate that a problem with gambling behaviours may be developing. Zapelli describe these as low to medium risk indicators on the continuum and that high risk indicators described by the problem gamblers themselves were skipping work, hocking other people's things, stealing/embezzlement, imprisonment and suicide.

Nonetheless, as Thomas, Jackson and Blaszczynski (2003, pp. 15-16) note, there is a lack of conceptual clarity as to whether problem gambling is a categorical disorder as suggested by the medical model (either a person is classified as a problem gambler or he/she is not), or whether it is a dimensional behaviour lying along a continuum. Wenzel, McMillen, Marshall and Ahmed (2004) in their paper, *Validation of the Victorian Gambling Screen*, draw out the conflict between those taking a medical approach and those who focus on social harms: "… theoretical models that view problem gambling as an addiction or disorder are likely to regard it as dichotomous, as being either absent or present in a person. In contrast, theories of problem gambling that regard it rather as a social problem are more likely to think of it as a continuum, where gambling can be more or less disruptive to one's social life and where social environments may vary in their reactions to gambling involvement." Thomas, Jackson and Blaszczynski's (2003, p. 19) opinion with respect to the debate on whether problem gambling is a dichotomy or a continuum arises from the "imprecision and ambiguity as to the conceptualisation of problem gambling and gambling problems and the purposes of problem gambling measurement tools within the literature". They are of the view that the conception of problem gambling can be both as a dichotomy and a continuum with the underlying parameter being the continuum but with a cut-off point chosen to categorise gamblers with less severe problems as problem gamblers and those with more serious problems as pathological gamblers. This approach might serve the needs of those clinicians who treat problem gamblers - for diagnosis, measurement and replication purposes, and the needs of

service providers who do not require a clinical diagnosis but rather require some guidance as to whether intervention is required.

In developing their definition of problem gambling for use in Victoria, Dickerson, McMillen, Hallebone et al. (1997, p. 103) adopted the continuum approach partly in response to the lack of a demonstrated pathology (or etiology) for many of those who are classified as problem gamblers, and partly because they wanted to recognise the importance of social and cultural influences. They were particularly concerned that the APA DSM-IV criteria ignore that harm is "… contextually based and that an observable continuum of gambling involvement … precludes a valid typology of gamblers" (AIGR, 1997, p. 103).

Allcock (1995) also thinks that pathological gambling does not exist as a discrete entity and that if persons are categorised on the basis of diagnostic criteria as problem or pathological gamblers, they will be so categorised only because of the decision with respect to where the cut-off point is, rather than by anything that is universally inherent to the condition called pathological gambling. O'Connor, Ashenden and Raven et al. (1999, p. 2) reflects this view arguing that although the DSM-IV criteria and SOGS are of clinical relevance it may not be desirable to reach a firm diagnosis of problem gambling on the basis of five out of ten criteria or a given cut-off score. They favour Dickerson, McMillen and Hallebone et al.'s 1997 harm based definition of problem gambling referring to it as a psychosocial and fluid definition that is broad enough to encompass all those who could be identified as having a problem with their gambling. However, they make a distinction between what is required for replication and research; here diagnostic criteria are important, but for intervention they favour Dickerson, McMillen and Hallebone et al.'s 1997 definition.

The NRC (1999, pp. 24-25) in its critical review of pathological gambling was critical of the continuum approach: "The concept of a continuum of problem severity implies that people can be located at a point on a continuum. They can move from that point, developing more or less serious difficulties. This analysis suggests that gambling problems reflect an underlying unidimensional construct. Although individuals can theoretically move across a continuum of problem severity and some scholars believe that gambling problems may best be conceptualised as a developmental continuum of gambling behaviours with respect to frequency and intensity, there is no empirical evidence that actual progress of the illness is linear (Shaffer, Hall and Vanderbilt, 1997)." They argue that although an increasing relationship between the point on the continuum and harms is often asserted in the literature, this is not supported by available research, nor is a progressive gambling behaviour continuum. However, they do argue (NRC, 1999, p. 22) that it can be useful to conceptualise progressively harmful gambling behaviours on a continuum similar to the progressive stages and harms of alcoholism.

Sharpe (2002, p. 15) argues that it is premature to conclude that a continuum approach is consistent with available research. To determine whether problem gambling is consistent with the continuum approach, comparisons need to be made between problem and non-problem gamblers, and yet most clinical studies are of those gamblers who have been categorised as pathological and involve very small sample sizes. She refers to research of factors that are important to most accounts of problem gambling: different levels of impulsivity and different arousal patterns between social and problem gambling groups, and differences in attitudes and information processing that may point to a categorical distinction between social gamblers and problem gamblers.

Box 3
Problem Gambling Defined in Terms of a Continuum

Strengths

- Gambling treated as a dimensional behaviour rather than as a categorical disorder.
- Broad enough to encompass all who could be identified as having a gambling problem.
- Focuses on adverse consequences rather than underlying pathology.
- Contextually based.
- Useful for intervention from perspective of service providers.
- Problem gamblers themselves tend to talk in terms of a continuum of problem gambling behaviours.

Weaknesses

- Lack of conceptual clarity as to whether problem gambling is a categorical disorder or based on a continuum.
- Difficulties in use for diagnosis.
- Difficulties in use for measurement, replication and research.
- Little empirical evidence to support linear progression along a continuum.

3.4 Problem gambling defined in terms of harm to the individual and to others

Drawing on the continuum approach to problem gambling, Australian researchers and practitioners have tended to favour defining problem gambling in terms of the harms it gives rise to for the individual and to any other persons who are affected by that individual's gambling behaviour. This leads to wider but less precise definitions of problem gambling than those favoured by the medical model but it leads to the incorporation of aspects of problem gambling that may affect whether gambling behaviours result in harms based on sociocultural features of the gamblers and the context in which the gambling takes place such as ethnicity, culture, misperceptions consumers may have with respect to gambling, and risks posed by the venue in which the gambling takes place (Productivity Commission, 1999, p. 6.8). The Australian harm-based approach to problem gambling has been pragmatic accepting that community and personal dimensions of problem gambling are broader than a clinical problem but using the US 'clinical test' approach to measure some aspects of the problem. Thomas, Jackson and Balszczynski (2003, p. 16) in a report for the GRP suggested that a focus on harm as the foundation of a measure is appropriate for determining the socio-economic impact of excessive gambling and that it *may* be useful in screening for persons who are at risk of developing into problem gamblers.

Dickerson, McMillen and Hallebone et al. (1997, pp. 105-106) in research conducted by the Australian Institute of Gambling Research for the Victorian Gambling Research Panel, after reviewing the literature on problem gambling synthesised the definitional issues as follows: 'social' involvement in gambling activities tends to be readily distinguishable from 'problem gambling' as a result of harms accruing to the latter, there is no unique characteristic that reliably and validly identifies problem gambling, the subjective appraisal of gambling-related impacts in determining whether they are harmful is crucial, but alone is not an adequate definition, there is empirical evidence that for some people, gambling leads to significant harms for them and/or their families, and the issue for the so-called 'problem gambler' is not gambling *per se*; it is whether the associated gambling impacts are harmful. Dickerson, McMillen and Hallebone et al. (1997, p. 106) recommended the adoption of the following definition:

> *'Problem gambling' refers to the situation when a person's gambling activity gives rise to harm to the individual player, and/or to his or her family, and may extend into the community'.*

A range of 'harms' were identified: intrapersonal – impacts that distress the player, interpersonal – impacts that distress others, financial – expenditure on gambling is higher than can be afforded by the gambler, vocational – gambling leads to loss of productivity, absenteeism or loss of job; and legal – the gambler undertakes illegal acts to finance his or her gambling. However, no specific definition of harm was suggested. The authors note that 'harm' is essentially a value judgement made by the gambler and by others; also that whether an impact from gambling is harmful is determined to a significant degree by the context.

The authors thought that a key strength of the above definition was that it recognised impacts from gambling are contextually based according to factors such as income, gender, lifecycle, traditions and social norms and values (Dickerson, McMillen and Hallebone et al., 1997, p. 107). The Victorian Department of Human Services noted that an advantage of this definition is that it emphasises the qualitatively different nature of problem gambling from normal gambling activities (Cultural Partners Consortium Australia, 2000, p. 24). Other advantages - that the definition is referenced in both individual and societal terms, and that it is assumption free with regard to models and could therefore underpin any number of eclectic approaches - were recognised by O'Connor, Ashenden and Raven et al. (1999, p. vi) in another report prepared for the Victorian Department of Human Services.

Similarly to Dickerson, McMillen and Hallebone et al. (1997), the Canadian Inter-Provincial Task Force on Problem Gambling (Ferris, Wynne and Single, 1999) offered a definition based on harm. The Canadian definition was developed from the authors' characterisation of problem gambling as a continuum and as a public health issue that afflicts the individual, those around him or her and the community:

> *"Problem gambling is gambling behaviour that creates negative consequences for the gambler, others in his or her social network, or for the community."*

The authors' intention was to develop a definition that would allow for use in prevalence studies but also broaden the scope of problem gambling beyond depiction as a psychiatric phenomenon. They accepted, based on the work of other researchers, that problem gambling is the result of a predisposition toward behaviours that develop into gambling problems in response to specific environmental conditions or stimuli. However, they were also of the view that the focus on the individual was misplaced. They saw the advantages of their new definition as having a greater focus on environmental and social factors believing they were potentially more important than behavioural indicators (Ferris, Wynne and Single, 1999, p. 4:15). They noted a disadvantage as well: environmental and social factors are harder to assess and are not as concrete as behavioural indicators. This new definition was to lead to the development of an instrument, the Canadian Problem Gambling Index (CPGI) which drew from frameworks outside the psychiatric and psychological research domains, an approach that the Productivity Commission (1999, p. 6.43) found promising because the new index placed far greater emphasis on the harms arising from gambling and environmental factors that might contribute to gamblers becoming 'problem gamblers' than did the pre-existing SOGS, DSM-IV and NODS screens.

Ferris, Wynne and Single (1999, p. 4:16) were very explicit about their definition being an operational definition that required general population studies to examine four main dimensions: (1) the extent to which individuals participate in the full range of gambling activities, (2) individuals' problem playing or gambling behaviour, (3) cognitions and

emotions related to playing, and (4) the negative consequences for the individual, others and the community.

Smith and Wynne (2002, p. 18) summarised the advantages of the Canadian definition; comments that could equally be applied to Dickerson, McMillen and Hallebone et al.'s 1997 definition:

> *"This definition is useful in general population surveys because the definition prescribes that research must seek (1) to identify "problem behaviour" associated with gambling activity, and (2) to ascertain the adverse consequences of that behaviour, for the person, his/her family, friends, co-workers, and the community-at-large. Because of its wider focus, this definition is somewhat removed from traditional medical or clinical usage of the term, which fixates on understanding the etiology of the disorder and treating the person with the problem. This new definition retains the individual focus but expands the analysis to include the impact of the gambler's behaviour on others. In this way, interventions can zero in on families, social groups, and the community as a whole in addition to problem gamblers."*

However, the Canadian Task Force recognised concerns with respect to the difficulty of making operational use of its definition. The Task Force "… acknowledge that considerable further effort will be needed to put operational criteria around the definition, as even the term 'negative consequences' requires further specification".

Abbott and Volberg (1999, p. 81) in *Report Number One of the New Zealand Gaming Survey* are critical of the Victorian definition because it presents similar operational difficulties:

> *"While this [harm-based] approach is much more inclusive than the DSM pathological gambling categorisation and may well provide a useful framework to guide research and organise research findings, it could be expected to present an enormous challenge in terms of operationalisation. In addition, because what is judged to be harmful is heavily context specific and thus mecurial, it could make comparison from one study to another difficult or impossible. Walker (1998) has expressed similar concerns about this new definition of problem gambling and calls for an approach that uses more objective criteria".*

Amies (1999, p. vi) in a report for the Australian Department of Health and Ageing also foresaw the difficulties in making a harm-based definition operational quoting Dickerson, McMillen and Hallebone et al. (1997, p. 2): "Where the individuals and families involved live in a society with diverse cultural values and expectations then it will be more difficult, for researchers and providers to discern the nature and extent of harm". Walker (1999, p. 5) similarly argues that the Victorian definition is subjective because it uses subjectively based criteria of 'harm' and so is inadequate to define problem gambling. Amies' view was that Dickerson, McMillen and Hallebone et al.'s definition would support research within its own terms but could not be used as the basis for research into the innate characteristics or causes of problem gambling. She is very specific with respect to the strengths of the Dickerson, McMillen and Hallebone et al. definition: the definition provides a non-judgemental tool for gamblers or family members to "own" that there is a problem and to seek help, allows for cultural differences, and would assist with monitoring service usage; but also the definition's weaknesses: the definition does not provide a predictive capacity, and supports only limited measures in relation to assessing the type of assistance needed by individual gamblers (Amies, 1999, p. 9).

Slade and McConville (2003, p. 13) are also critical of the Victorian definition as being too 'loose': "In a research transition … through to the more recent and loose assumptions about problem gambling defined as self-assessed 'harm' …". Yet another criticism of Dickerson, McMillen and Hallebone et al.'s 'harm' based approach is that it leads to

advocacy of harm minimisation strategies with little analysis to support the recommendation (Svensen undated, p. 6).

There are a considerable number of other definitions of problem gambling based around the adverse consequences of gambling. The Queensland Department of Corrective Services Gambling Survey (2002, p. 13) makes use of the Canadian harm-based definition of problem gambling but also describes problem gamblers as:

> *"Persons who have experienced adverse consequences from their gambling behaviours and may have lost control of their behaviour. Involvement in gambling is likely to be heavy."*

This definition recognises that gambling behaviours are not problematic unless they result in adverse consequences but that this is more likely with heavy gambling; and that although loss of control may lead to adverse consequences, loss of control is not necessary for adverse consequences to arise.

Lahn and Grabosky (2003, p. 10) in a report for ACT Corrections defined problem gambling in terms of its negative effects:

> *"Problem gambling can be defined by the negative effects that gambling activities have on the gambler, their personal relationships, working life and the wider community"*

and:

> *"Problem gambling can be defined by the negative effects it has on both the individual, their family and other relationships they might have, and by a person's inability to effectively carry out their work duties or study obligations. In addition, problem gamblers tend to have minimal or no control over the amount of money they use to fund their gambling activities and experience difficulties in abstaining from gambling activities (AIGR 2001a, PC 1999)".*

The strength of this definition is that it encapsulates several of the features that are common to those persons who are generally recognised as problem gamblers; that their gambling gives rise to adverse consequences for them and others, that the source of their gambling problems tends to be financial, and that they have difficulty in resisting the impulse to gamble. Nevertheless, the definition is subject to the criticisms that have been levelled at other harm-based definitions – the subjective nature of harms and difficulties in using harm-based definitions to measure problem gambling or to compare studies on problem gambling across differing groups.

Blaszczynski, Walker, Sagris and Dickerson (1999) also use a definition that encompasses the financial aspects and adverse consequences of problem gambling. Although the definition is not explicit with respect to difficulties in confronting the impulse to gamble, it does recognise that problem gambling generally arises from a repetition of gambling behaviour despite its adverse consequences. Blaszczynski, Walker, Sagris and Dickerson (1999, p. 4) define *excessive gambling* as gambling that leads to financial strain but problem gambling as:

> *"a repeated pattern of behaviour that leads to the emergence of actual problems beyond mere financial strain; this includes marital conflict, accumulated debts, borrowings, and impairment in other areas of social and vocational functioning."*

Queensland Government Treasury (2002, p. 3) has also adopted a harm based definition:

> *"Problem gambling exists when gambling activity results in a range of adverse consequences where:*
>
> - *the safety and wellbeing of gambling consumers or their family or friends are placed at risk, and/or*

- *negative impacts extend to the broader community."*

The Independent and Regulatory Tribunal of NSW cites the Queensland definition in its recent review on gambling (IPART, 2004, p. 16) but notes difficulties with its operability because thresholds can be subjective and related to life circumstances, and so there are difficulties with using this definition for the objective measurement of problem gambling.

The Productivity Commission (1999) listed a large number of other researchers' definitions of problem gambling, many of which, but not all, focused on harms but avoided putting forward a definition itself. Dickerson, McMillen and Hallebone et al.'s 1997 definition topped the list. Other definitions the Commission cited that primarily pertained to harm included the following (Productivity Commission, 1999, p. 6.3):

> *"Problem gambling encompasses all of the patterns of gambling behaviour that compromise, disrupt or damage personal, family or vocational pursuits"* (National Council on Problem Gambling [US], 1997);
>
> *"Problem gambling is any pattern of gambling behaviour that negatively affects other important areas of an individual's life, such as relationships, finances and vocation. The mental disorder of "pathological gambling" lies at one end of a broad continuum of problem gambling behaviour* (Volberg et al., 1998, p. 350); and
>
> *"Problem gambling is defined as a chronic failure to resist gambling impulses that results in disruption or damage to several areas of a person's social, vocational, familial or financial functioning"* (Blaszczynski et al., 1997).

Many other definitions that have been included with the discussion of definitions that are based on gambling as an economic problem or impulse control disorder also contain reference to the harm that problem gambling gives rise to. Instead of putting forward a harm-based definition itself, the Productivity Commission described the features widely recognised as characteristics of problem gamblers: personal and psychological characteristics, gambling behaviours, interpersonal problems, job and study problems, financial effects, and legal problems. The Productivity Commission (1999, p. xii) does see problem gambling behaviour as a continuum: the glossary explanation for 'problem gambling' is "[problem gambling is a continuum – some people have moderate problems and others have severe problems". It accepts that problem gamblers are a heterogeneous group and that 'problems emanate from a multiplicity of environmental, social and psychological facets' (Productivity Commission 1999, p. 6.8).

Hing (2000, p. 100) sees advantages other than those discussed above in the refocusing of the definition of problem gambling from one that focussed on the individual to one based on harm that recognises negative impacts extend beyond the individual. She argues that harm-based definitions invite further research into social impacts and harm minimisation strategies and place the onus of responsibility for addressing problem gambling on to gambling providers and governments which control the context in which gambling is controlled, operated and managed.

South Australian legislation also makes use of a harm-based definition of *excessive gamblers* in its *Gaming Machines Act* 1992, p. 50 and *Authorised Betting Operations Act* 2000, p. 59 with reference to the barring of excessive gamblers:

> *"If the holder of a gaming machine license [major betting operations license] is satisfied that the welfare of a person, or the welfare of a person's dependants, is seriously at risk as a result of excessive gambling, …"*

This definition suggests that *potential* harms are a consideration in determining whether a person is a problem gambler; the negative impacts of problem gambling need not already have arisen in order that a person be classified as an excessive gambler for those acting to bar excessive gamblers in accordance with the legislation. A similar interpretation of excessive gamblers is made in section 44 of the South Australian *Casino Act 1997*.

The New Zealand *Gambling Act 2003* (p. 21) also contains a definition of a problem gambler where the problem gambler may potentially cause harm:

> *"Problem gambler means a person whose gambling causes harm or may cause harm."*

The Act also contains a definition of harm (to be discussed later in the section on gambling-related harms) but as with most other harm-based definitions, the harms pertain to those suffered or likely to be suffered by the individual gambler, his or her family, wider community, workplace and by society at large.

In correspondence to this review (letter dated 24 July 2004), Clive Allcock outlined his broad harm-based definition of problem gambling:

> *"… problem gambling - namely any gambling which currently causes harm to the individual or those near to them. This harm is usually reflected in the loss of sufficient money to cause some financial hardship, but may also involve the loss of time from important activities such as work or family".*

Allcock uses a broad definition as he does not believe pathological gambling exists as a discrete, valid disease entity: "People have small or large problems, they vary from time to time and to create an entity may exclude some people (if you get 3 out of 10 on DSM do you not have a problem?) and allow others to blame some mysterious illness they "have" so, perhaps, making change harder".

As indicated earlier, a number of researchers and stakeholders are critical of definitions of problem gambling based around harm because of its subjective nature, difficulties with its use for measurement and that knowledge of context is crucial to determining whether gambling behaviour is problematic or not. Some of these issues are to be further discussed in this report with reference to defining gambling related harm.

Box 4
Problem Gambling Defined in Terms of Harm

Strengths

- Broader than a clinical approach but can encompass clinical approach if desired.
- Wider definition of problem gambling than other approaches: can take into account harms, financial aspects and difficulty with controlling impulse to gamble.
- Problem gambling is not attributed to an underlying pathology that may or may not exist.
- Distinguishes social gambling from problem gambling.
- Gambling is not a problem *per se*; problem gambling arises from harmful impacts.
- Referenced in both individualistic and societal terms.
- Contextually based.
- Assumption and model free; can therefore underpin eclectic approaches to problem gambling.
- Interventions focus on individual, family and wider community.
- Useful for monitoring service usage.

Weaknesses

- Less precise definition of problem gambling than other approaches.
- No precise definition of harm leading to difficulties for operational use.
- Uses subjective rather than objective criteria.
- Contextual basis leads to difficulties in comparison across studies.
- Inadequate for objective measurement, replication and research.
- No predictive capacity.
- Cannot be used as basis for research into innate characteristics or causes of problem gambling.
- Supports only limited measures in assessing assistance required by individual gamblers.

3.5 Problem gambling as a social construct

Some authors argue that problem gambling is a social construct. For example, in a report prepared for the Victorian Casino and Gaming Authority (*The Impact of Gaming on Specific Cultural Groups*), Thomas and Yamine (2000, p. 28) stated "… problem and pathological gambling are arguable social constructs that do not have the same tightness of definition that the occurrence of diseases may have". Slade and McConville (2003, p. 7) also see problem gambling as a social construct although they are critical of the focus on problem gambling as a medical problem when they see gambling behaviour as having an evolutionary basis in that those who were prone to take the greatest risks were those most likely to survive and that risk-taking behaviour survives today in many entrepreneurial activities: "It took the construction of a problem gambler to cast a far wider social stratum as psychologically repressed and in need of therapy" rather than seeing gambling indebtedness for what the authors believe it is: an economic phenomenon linked to historic and cultural settings.

The United States National Research Council (NRC) (1999, pp. 31-32) also recognised that problem gambling is recognised as such because it offends cultural mores: "The class of impulse disorders in which pathological gambling has been placed represents a set of behaviours that are violations of social mores and customs and therefore considered harmful. The dysfunctional nature of these disorders in general and pathological gambling, in particular, however, remains to be determined".

Hammond (1997), an Australian family therapist, emphasised the importance of contextual factors following some discussion of how widely definitions of problematic gambling patterns varied, definitions which he thought as often based on personal and cultural viewpoints as on clinical criteria. In undertaking therapy with problem gamblers, he argued that it is essential to take into account contextual factors: "*Gambling behaviours are viewed as intentional and assumed to have a life enhancing meaning and significance at some level, a significance that becomes evident when the current and historical contextual factors are taken into account.* Gender, ethical and power or dependency issues need to be considered in the therapeutic endeavour with clients. Many problem gambling cases comprise complex marital and familial relationship issues along with problematic gambling patterns …" (emphasis added). He also argued that relationship, fertility and migration issues often form a context from which problem gambling develops.

Lahn and Grabosky (2003, p. 10) point to the similarity of definitions currently used in Australia and New Zealand: "Currently, the term 'problem gambling' receives wide usage, especially in Australia and New Zealand, as a way of escaping the medical model and allowing for other socio-cultural understandings to emerge. Definitions of problem gambling are currently very similar and broad in scope (see PC 1999:6.5)". Similarly, the Canadian Problem Gambling Index (CPGI) was developed in order to have a tool that could be used to measure the prevalence of problem gambling which took a more holistic view of problem gambling than did the SOGS or DSM-IV by including more indicators of social context.

4. Sociocultural aspects of problem gambling

Whether gambling behaviour is viewed as social or recreational, or whether it is viewed as problematic will depend on the cultural prism through which the gambling behaviour is observed and so there is increasing recognition that cultural, social and environmental factors need to be taken into account in discussing, diagnosing or implementing public policy measures to deal with problem gambling. Some cultures have a more tolerant attitude towards gambling and so-called problem gambling than others. Donna Gabb (2000) whose work is summarised by Thompson, Other-Gee and Penter (2002, p. 79) argues that the current understanding of problem gambling in Australia "… is embedded in mainstream Anglo-Australian concepts of individualism, autonomy and personal responsibility. She argues there is no understanding of the collectivist value systems in which the family or community, rather than the individual is the core unit". *Women and Gambling* (2003, p. 25) notes that Eastern cultures tend to place emphasis on factors external to the individual - destiny and fate, and harmony with others so that it is important not to burden others with one's problems. Family and community needs are more important than individual needs. The importance placed on these factors can prevent many from collective cultures seeking help with gambling problems. In contrast, Western ideology suggests that individuals have control over their own fates and must therefore take responsibility for shaping their lives. After discussing how different cultural groups in Australia may have different attitudes towards gambling, its morality and hence problem gambling, Amies (1999, pp. 5-6) argues for a new definition of gambling (one that is wider than "gambling involves staking money on uncertain events driven by chance") which reflects Australian experiences of gambling and assists further understanding of these experiences.

The Victorian Department of Human Services (1999) adopted the approach that the term "Problem Gambler":

> *"… should only be taken as indicating that the person has presented themselves as being involved in problem gambling activity. It should not be taken as the authors agreeing or disagreeing with this self-assessment. Further, it should not be taken as agreeing (or disagreeing) that the person would necessarily satisfy the Department of Human Services, or any other criteria for problem gambling. The authors do accept as a useful starting point the definition of problem gambling presented in the recent VCGA report".*

4.1 Demographic profiles of problem gamblers

Dickerson, McMillen and Hallebone et al. (1997), Abbott and Volberg (1999), Productivity Commission (1999) Western, Boreham, Johnston and Sleigh (2001), Delfabbro and LeCouteur (2003) review studies that lead to a consideration of the demographic profile of a "typical" problem or pathological gambler, and how this might vary across cultural groups and forms of gambling. According to prevalence studies carried out in Australia and overseas the typical profile of a problem gambler is a male person, under 30, unmarried, who has typically started gambling earlier in life than a non-problem gambler. Overseas studies also find that the problem gambler is more likely to be non-Caucasian, unemployed, and less educated (see studies referred to in Western, Boreham, Johnston and Sleigh, 2001, p. 31). Abbott and Volberg (1996) found being unemployed and of Pacific Island or Maori ethnicity were additional risk factors in New Zealand (Abbott and Volberg, 1999, p. 107). Whether Australian Aboriginals are also more likely to develop gambling related problems than Caucasian Australians is uncertain. A review of the empirical literature by Wardman, el-Guebaly and Hodgins (2001) found the prevalence of problem and pathological gambling appears to be much higher in North American Aboriginal populations both among adults and

adolescents than in the general population. Shaffer, Hall and Vanderbilt (1997) found using meta-analysis of North American studies that being young, male, in college, having psychiatric co-morbidity, or a history of antisocial behaviour were also characteristics that increased the risk of developing gambling-related problems.

Delfabbro and LeCouteur (2003) find from a review of Australian and New Zealand surveys that gender and age account for preference for particular gambling activities. Other apparently important factors in explaining preference for some activities such as income, employment and marital status are so highly correlated with gender and age, that gender and age themselves are sufficient to explain gambling preferences by type. Delfabbro and LeCouteur describe demographic profiles for persons by gaming activity drawing on surveys conducted by the Productivity Commission (1999), the South Australian surveys of Delfabbro and Winefield (1996), the South Australian Department of Human Services (2001) and Abbott and Volberg (2000) in New Zealand. Delfabbro and LeCouteur (2003, pp. 18-22) find that young people and men report preferences for casino games, keno, sports betting and racing, with low levels of female participation due to a combination of venue characteristics, the entry cost of individual games, variations in knowledge, adolescent interests and experience, and motivational factors; whereas older people and women report favouring lotteries, bingo and instant lotteries. The losses associated with these latter activities are smaller and the activities themselves are non-continuous so that persons engaging in these activities are less likely to become problem gamblers.

Abbott and Volberg (1999, p. 109) conclude from Australian and New Zealand surveys that preferences for gaming machines, track betting and casino gambling (including machines) are consistently associated with SOGS-R defined problem and probable pathological gambling and that these findings parallel those from gambling treatment services and are consistent with findings from Sweden (Ronnberg, Abbott and Volberg, 1998a and b). Adolescents and women in particular seem to have a preference for electronic gaming machines. Research has shown that those persons who are most likely to develop gambling related problems are those who prefer continuous forms of gambling where the interval between the initial stake or wager, the play, the outcome and the time to resumption of a new play once the outcome has been determined is very short (Dickerson, McMillen and Hallebone et al., 1997, p. 61; and Delfabbro and LeCouteur, 2003). Electronic gaming machines, racing, keno and casino games represent continuous gambling activities whereas lotteries and lottery style products have a very low level of continuity. A study of the clients of problem gambling services in Victoria (New Focus Research, 2003) found that the principal form of gambling engaged in by self-identified problem gamblers was overwhelmingly electronic gaming machines.

The increasingly widespread availability of electronic gaming machines as a continuous form of gambling may have been a factor in increasing the prevalence of problem gambling. There is also some limited evidence that more widespread distribution of electronic gaming machines than in the past has lead to an increase in the prevalence of gambling related problems amongst women. Abbot and Volberg (1999) canvass some US studies which show in jurisdictions where gaming machines are widespread, problem gambling amongst women is as prevalent as amongst men. However, they note that Australian prevalence studies still point to a strong gender difference but that in States in Australia such as Queensland, Victoria and South Australia where gaming machines are widely distributed service providers find little difference in the number of men and women presenting for treatment. Similarly, in New Zealand, males are more likely to have developed gambling related problems but the number of women who call gambling help hotlines has increased in recent years and they have

typically reported developing gambling related problems through play on electronic gaming machines.

4.2 Attitudes to gambling and problem gambling among Indigenous and ethnic groups

As indicated above, there is some evidence that the prevalence of problem gambling is higher among non-Caucasians and Indigenous groups. Abbott and Volberg (1999, p. 111) refer to studies that have identified substantially higher prevalence rates of problem gambling amongst New Zealand Maori, Native Americans in Montana and North Dakota and the general population in Puerto Rico (Polzin, Baldridge, Doyle, Sylvester, Volberg, and Moore, 1998; Volberg and Abbott, 1997; and Volberg and Vales, 1998). The New Zealand, Montana and most of the North Dakota studies were conducted by telephone. Other North Dakota surveys were conducted using personal interviews with the Puerto Rican study using Puerto Ricans to conduct interviews in person. Maori and Islander people have a very strong interest in gambling with a preference for continuous forms with Abbott and Volberg (2000) finding much higher prevalence rates than amongst the general population (Delfabbro and LeCouteur, 2003).

The evidence with respect to Australian Aboriginals is mixed. Abbott and Volberg (1999, p. 112) note they were aware that community surveys had been conducted amongst Australian Aboriginals which indicated very high prevalence rates but that the results had not been published. Dickerson, McMillen and Hallebone et al. (1997, p. 67) refer, in general terms, to population surveys that have been conducted in the US, New Zealand and Australia which suggest problem gambling is significantly higher amongst Indigenous respondents. They then discuss a NSW study (Dickerson, Allcock, Blaszczynski, Nicholls, Williams, and Maddern, 1996) that used Aboriginal interviewers to interview an urban group of Aboriginals which showed that Aboriginal respondents were much more likely to prefer continuous forms of gambling (suggesting that they will be more prone to developing gambling problems) and that gambling-related impacts were more likely to lead to adverse consequences in the Aboriginal group because of their initially low socio-economic status. However, they do not note whether prevalence rates were, in fact, higher amongst the Aboriginals interviewed.

Delfabbro and LeCouteur (2003, p. 28) in their review of the literature find little evidence to suggest that Aboriginals have higher prevalence rates. In a study conducted for the South Australian Department of Human Services (2001), Indigenous people were reported to have a preference for non-continuous gambling activities not generally associated with problem gambling. A submission to the Productivity Inquiry (1999, p. E.3) indicated that prior to the introduction of electronic gaming machines in South Australia TAB gambling had been very popular with ATSI men, and continued to be so after the introduction of EGMs. For ATSI women, bingo, lotteries and scratch tickets were popular, but there had been some migration towards gambling on EGMs. Foote (1996) observed Aboriginals in the Darwin Casino and found that Aboriginal women were more likely to be seen there than Aboriginal men, and that three-quarters of the Aboriginal group observed at the Casino over a two week period gambled on poker machines. Indigenous people in several communities in Queensland had a much greater preference for continuous forms of gambling and spent significantly more on gambling per week than did the general population. In Yarrabah 50 per cent of Indigenous people gambled at least on a weekly basis compared with 4 to 6 per cent in the general population.

Foote (1996) and submissions to the Productivity Commission (1999) argued that gambling is a traditional aspect of some Indigenous cultures facilitating social interaction and providing some enjoyment. Although some studies suggest the prevalence of problem gambling in Aboriginal communities is higher than for the general population, the Productivity Commission (1999, p. E.1) notes that the patterns of gambling and its social and personal consequences are different in Aboriginal communities. In many communities, card games are the dominant activity, are generally organised by the communities themselves and may involve children. For individuals, concerns about losses don't generally relate to indebtedness but rather to the lack of money with which to continue playing. There is no shame attached to losing and gambling often serves a positive redistributive function in the community.

At least one submission to the Productivity Commission, however, was concerned that for some ATSI communities, the TAB and electronic gaming machines had become the most attractive forms of gambling having more serious implications for individuals, families and communities. Gamblers had unrealistic expectations of their success at these activities which were taking place outside the communities - draining money from them, and reducing social interaction. An earlier study of Indigenous people in the north-west of Western Australia (Hunter, 1993) found Indigenous people at significant risk of developing problem gambling behaviours which affected entire communities through poor nutrition, dysfunctional parenting, substance abuse, poor hygiene due to utilities being cut off, high anxiety and levels of petty crime (Thompson, Other-Gee and Penter, 2002).

There is evidence that other non-Caucasians in Australia also have higher prevalence rates of problem gambling than do Caucasians, particularly amongst the Vietnamese population. Delfabbro and LeCouteur (2003a) review studies by the VCGA (1997 and 2000), Zysk (2002), Productivity Commission (1999) and Duong and Ohtsuka (1999) which suggest, based on the observations of Casino staff, more than one-quarter of the patrons who enter the Crown Casino in Melbourne are of South-East Asian appearance, that Vietnamese gamblers gamble in order to relieve stress and boredom associated with difficulties as new immigrants, they take gambling very seriously viewing it as a potential source of income, they favour a narrow range of activities – roulette, card games and electronic gaming machines, and that gambling forms a focal point for many social activities. Delfabbro and LeCouteur also report that in key informant interviews they found that Vietnamese people themselves viewed gambling as a serious problem in their community, but that problem gamblers are unwilling to admit to gambling problems because of "loss of face".

Thompson, Other-Gee and Penter (2002, p. 77) summarise the sociocultural aspects of a major study into gambling problems amongst certain Asian communities in Western Australia (Tan-Quigley, McMillen, and Woolley, 1998) that found:

- "definitions of social gambling and problem gambling are culturally specific, deeply entrenched and not subject to easy modification;
- factors such as economic hardship and social estrangement are seen as factors affecting problem gambling;
- social gambling is generally seen as acceptable, while heavy, persistent or problem gambling was perceived negatively; the breakdown of traditional family support and the accessibility of gambling outlets are the most salient factors in precipitating gambling problems; and
- despite the general acceptability of gambling, people identified as persistent or problem gamblers were likely to suffer a variety of sanctions".

Raylu and Oei (2004a) undertake a systematic review of the literature on the role of culture in gambling and problem gambling. They define problem gambling (p.2):

> *"PG occurs when gambling is out of control and it begins causing individuals social, personal, and interpersonal problems. … [We] will use PG in a broader sense-as gambling behaviour that meets the … DSM-IV diagnostic criteria … as well as those individuals experiencing gambling problems but who do not meet the diagnostic criteria".*

They find that most studies that have looked at gambling and problem gambling amongst Indigenous cultural groups report a higher prevalence rate than for the general population. Lesieur and Blume (1987) attributed higher problem gambling rates amongst North American Indians, in part, to their cultural acceptance of magical thinking that could be generalised to gambling. Higher rates of other correlates associated with problem gambling for both the general population and the Indigenous population (low socio-economic status, unemployment, alcohol use, depression, and lack of social alternatives) also contributed to higher prevalence in other studies (Cozzetto and Larocque, 1996; and Peacock, Day and Peacock, 1999). Overall, Raylu and Oei's (2004a) review of prevalence studies across countries suggested high rates of gambling among some cultural groups, ethnic minorities, Indigenous groups and non-Caucasians.

Raylu and Oei (2004a) note that every society has its own ethics in relation to gambling from total abstinence in some Moslem populations to a relatively high level of participation among the Chinese. Positive or negative values, beliefs and attitudes regarding gambling can be modelled or taught. Individuals from collective cultures are more likely to develop problem gambling behaviours if these are positive, and less likely to do so if they are negative than persons from individualistic cultural groups.

Australian evidence suggests cultural beliefs and values lead to preferences for different forms of gambling across cultural groups. A study of regular gamblers in NSW (GAMECS Project, 1999) found Vietnamese, Chinese, Korean and Croatian gamblers favoured casinos, Greek, Italian and Arabic participants favoured cards, and Macedonian, Korean and Spanish gamblers preferred club gaming machines. Gambling on horse races was most prevalent among Croatians and Macedonians.

A study for the Victorian Casino and Gaming Authority (Thomas and Yamine, 2000) on the impact of gaming on specific cultural groups conducted interviews and consulted with representatives from fourteen ethnic groups in an attempt to determine attitudes towards gambling, the impact of gambling and access to services by these groups. They found that broadly speaking European cultural groups did not perceive problem gambling as being widespread within their communities but that Vietnamese, Arabic, Chinese, Cambodian and Turkish communities expressed more concern. The Crown Casino had become a major social outlet for these latter communities. Arabic, Chinese, Vietnamese and Greek communities were less likely than other communities to use electronic gaming machines outside the casino. Shame associated with gambling problems prevents individuals from some communities seeking the assistance of support services. Asian and Chinese gamblers felt shame because of their losses through loss of face and loss of respect, and shame among Arabic and Turkish gamblers was based on religious principles because of the strict prohibition on gambling in the Islamic religion.

A major problem for all the ethnic communities was getting problem gamblers to access gambling support services which were sometimes perceived as culturally inappropriate because counselling was often associated with mental illness (which brings disgrace to the

whole family) and with other types of problems that problem gamblers did not perceive themselves as having. Loneliness, boredom and unrealistic expectations of making money in Australia by newly arrived immigrants were cited as factors in gambling problems for people from Yugoslavia, Vietnam and China. Similar problems were reported in a study of the Chinese, Greek and Vietnamese communities in Queensland by the University of Queensland Community Service and Research Centre (Scull, Butler, Mutzelburg and Queensland Traesury, 2003). Both the GAMECS Project (1999) and the VCGA (1999) studies found that Arabic, Chinese, Korean and Vietnamese problem gamblers were less likely to seek help from service providers even though they were more likely than other cultural groups to have more gambling related debt, more problems clearing the debt and were spending more than they could afford (Raylu and Oei, 2004, p. 10).

The GAMECS Project (1999) found that Arabic, Greek, Italian, Korean, Macedonian, Spanish, and Vietnamese communities were of the view that support for problem gamblers and their families should be provided by government. The Chinese and Croatian communities thought the onus was on the individual, the family or their own community to take responsibility for supporting problem gamblers. In Hispanic cultures, there is a highly permissive attitude towards gambling that leads to a reluctance to admit to gambling problems and seek assistance (Cuadrado, 1999 summarised in Raylu and Oei, 2004, p. 11).

One clear fact to emerge from many of these studies is that service providers must be culturally aware and be able to provide services in the languages of those communities that they are seeking to help if they wish to encourage problem gamblers and those affected by problem gambling in culturally diverse communities to access problem gambling and related services.

Raylu and Oei (2004) suggest that acculturation to the habits of a host country can increase particular behaviours, and that it is possible that increased and problem gambling may be evidence of successful or unsuccessful adaptation to the mainstream culture of the host country. For immigrants coming from countries where attitudes towards gambling are less permissive than in the host country, increased gambling may be indicative of successful adaptation to the greater gambling culture in the host country but can also lead to the development of gambling-related problems. Conversely, increased and problem gambling may be evidence of unsuccessful acculturation where, as suggested above, social isolation, loneliness, boredom and depression can turn new immigrants towards gambling as a way of relieving these stressors. The VCGA 1999 study was indicative of successful acculturation among the Croatian, Filipino, Greek, Macedonian and Spanish speaking communities, and unsuccessful acculturation among the Serbian, Vietnamese, Chinese and Turkish communities in Victoria.

5. Gambling related harms

5.1 Defining harm?

Although the diverse range of definitions of problem gambling often refer to harm, negative effects or negative or adverse consequences or impacts for the gambler, others and the community, and sometimes list a range of harms, those harms seem nowhere to be defined, with a few notable exceptions, other than by reference to lists of harms or questions in the instruments used for screening for problem gambling. In correspondence related to this review Charlotte Fabiansson states: "Gambling research has been and still is marred with *ad hoc* studies and lack of definitions of what can be considered as harmful effects of gambling activities" (email dated 12 August 2004). In fact, none of even the harm-based definitions specify specific relationships between gambling behaviour and harm. Thus, harms are largely based on individuals' own self-assessment of the problems engendered by their gambling behaviours (i.e., their responses to questions in the gambling screens, or their seeking assistance with respect to what they perceive to be gambling problems) that may arise from misperception, incorrect attribution of their problems to their gambling activities, and reluctance to admit to problems related to gambling because of strong socio-cultural pressures (Dickerson, McMillen and Hallebone et al., 1997, pp. 105-105).

The assessment of harm may be even more subjective than indicated above. For example, an individual who enjoys gambling may be identified by his or her spouse as a problem gambler because the gambling is ostensibly leading to marital problems through financial, time or religious pressures according to the spouse, and yet there may be no check on whether those problems would have arisen in the relationship whether or not the individual is gambling. Although harm(s) attributed by an individual to gambling behaviours may be an appropriate basis for individuals to seek assistance with their problems, it may be an inadequate basis for underpinning a research program or for planning public policy (Dickerson, McMillen and Hallebone et al., 1997, pp. 104-105; and Slade and McConville, 2003, pp. 11-12).

The definition of harm in the New Zealand *Gambling Act 2003* (pp. 15-16) is one of the few explicit definitions of harm and yet it is couched in such general terms it will probably be very difficult to make it operational:

> *"Harm-*
>
> *(a) means harm or distress of any kind arising from, or caused or exacerbated by, a person's gambling; and*
>
> *(b) includes personal, social, or economic harm suffered-*
>
> *(i) by the person; or*
>
> *(ii) the person's spouse, partner, family, whanau, or wider community; or*
>
> *(iii) in the workplace; or*
>
> *(iv) by society at large".*

The Queensland Government Treasury's (2002, p. 3) definition of problem gambling previously discussed also contains within it a definition of harm:

> *"… a range of adverse consequences where:*
>
> - *the safety and wellbeing of gambling consumers or their family or friends are placed at risk, and/or*
> - *negative impacts extend to the broader community."*

Other definitions of problem gambling previously discussed - especially the harm-based definitions but also many of the other definitions of problem gambling - contain references to

harm. However, these are usually expressed in very general terms as in the New Zealand definition where adverse consequences arising from gambling impact on the individual, his or family relationships, finances, vocation and the wider community. Strengths and weaknesses of the harm-based definitions of problem gambling and hence discussion of the strengths and difficulties associated with such general and wide-ranging definitions of harm implicit in those definitions have already been canvassed and so the discussion below focuses on material not yet covered in that section.

Fabiansson (email dated 12 August 2004) suggests it will be very difficult to develop a useful definition of harm because all components involved in the gambling event; the individual gambler, family and friends, local community and the wider society need to be taken into account as well as the individual's level of tolerance and circumstances. Such a non-specific definition incorporating all aspects of problem gambling and theoretical frameworks will be open to interpretation that will make it problematic to use. Fabiansson's concerns are reflected in the literature to be discussed below.

Ben-Tovim, Esterman, Tolchard and Battersby (2001, pp. 14-17) discusses the harm minimisation approach with reference to Dickerson, McMillen and Hallebone et al.'s 1997 harm-based definition developed by the AIGR for the Victorian Gambling Screen. They note that Dickerson, McMillen and Hallebone et al. offer no specific definition of harm, and so suggest that it is reasonable to interpret harm in the way that it is consistently defined in dictionaries as 'injury, damage, hurt'. They do recognise, however that this just pushes the definitional process one step further from defining the 'gambling syndrome' to defining the injury, damage and hurt that gambling causes. Dickerson (2003, p. 6) notes that the Victorian definition developed by him and others "… reflected current usage and deliberately avoided any theoretical assumptions. … The definition maintained the focus of the ongoing community debate on the harmful impacts of gambling that was the concern shared by all stakeholders, the government, the industry and the community. … the definition provides a contrast with the mental disorder model as it is based on observable outcomes 'outside' the individual".

Dickerson, McMillen and Hallebone et al. (1997) developed their definition as a precursor to the development of a new screen, the Victorian Gambling Screen (VGS) which was supposed to screen for problem gamblers with reference to the new definition. They state "[a]t this stage our understanding of **how** harm arises from gambling is **not** essential to the task of assessing the extent and degree of that harm to individuals and families within different sections of the community". Nonetheless, without defining harm, it will be impossible to measure the extent and degree of harm caused by problem gambling and it seems not to have been achieved by development of the VGS. Ben-Tovim, Esterman, Tolcahrd and Battersby (2001, p. 23) noted: "the major challenge would be to develop a clear understanding of what constituted harm as a consequence of problem gambling" in order to measure problem gambling. Expert judgement, focus groups and items for the scale which derived from the literature led to a scale of 21 items that comprised three factors: harm to the individual, the partner and the respondent's enjoyment of gambling. However, subsequent assessment suggests that they may have been unsuccessful in their attempt. Wenzel, McMillen, Marshall and Ahmed (2004, p. 59) in their report, *Validation of the VGS*, criticises the VGS as not realising the theoretical claim the VGS makes in defining problem gambling in terms of harm(s) as the VGS contains no explicit reference to harms to self, and harms to others have also been practically excluded from the problem gambling score.

Amies (1999, p. 8) was of the view that a better definition of gambling related problems is required, criticising Dickerson, McMillen and Hallebone et al.'s definition in terms of providing a basis for further research into the innate characteristics of gambling problems or the development of associated research methods:

> "…a better definition of gambling related problems is needed for a number of other purposes [i.e. other than dealing with adverse consequences once they have arisen]:
>
> (a) predictive screening;
>
> (b) estimating potential prevalence for policy and planning purposes;
>
> (c) providing gamblers and their families with a tool for understanding and monitoring gambling behaviour;
>
> (d) measuring the level of demand for assistance;
>
> (e) assessing the type of assistance needed by individual gamblers; and
>
> (f) 'keeping the stats'".

She was also of the view that there is a need for improved methodologies which more accurately identify the range of negative and positive impacts, so that these impacts can be assessed consistently across all States (Amies, 1999, p. 33). This would seem to be a crucial issue in making consistent operational use of a harm-based definition, rather than proceeding on an *ad hoc* or case-by-case basis. Although the latter might work for service providers, research, measurement and public policy planning would be better served by a definition that allows for consistent measurement and comparison of the results of studies across various jurisdictions.

Defining gambling-related harms becomes even more difficult because of the difficulty of disentangling cause and effect when examining problems that are seemingly related to problem gambling. Is it people who already have other problems that become problem gamblers, or is it that the gambling itself is the source of the problems being experienced by the gambler, his or her family and the community. Thus, the extent to which gambling causes problems can be easily over- or understated (Productivity Commission 1999, pp. 7.7-7.12; Delfabbro and LeCouteur, 2003, pp. 59-61).

The Productivity Commission discussed several measures that might be used in brief. One approach would be to use regression analysis which attempts to explain how much of the change in one variable (the harms caused by problem gambling in this instance) have been caused by changes in other variables. This method has the advantage of taking the influence of confounding variables into account by holding other possible influences on harms usually ascribed to problem gambling constant. As the Productivity Commission noted this was the method used by the NORC study (Gerstein, Volberg, Murphy and Toce, 1999). However, regression analysis does not deal with the issue of causality, that is, whether the harms ascribed to problem gambling are caused by problem gambling or alternatively, are the cause of problem gambling behaviours. The Productivity Commission (1999, p. 7.11) does note that self-assessment can provide a good perspective on causality because it makes use of the knowledge of respondents but some checks on the plausibility of responses need to be made. The Productivity Commission sought comments from an expert group who were of the view that, as a rule of thumb, around 15 to 20 per cent of the adverse impacts ascribed to problem gambling would have occurred anyway. The view the Productivity Commission (1999, p. 7.9) put forward was that the most effective way of identifying causal pathways relating to apparent adverse outcomes would be to conduct a longitudinal study of gamblers.

5.2 Harms

Problem gambling is now generally defined in terms of its social impacts (Hing, 2003, p. 7). As discussed above the closest the literature comes to defining gambling related harms is to describe and list those harms, with most harms extending beyond the individual gambler. Several typical lists are described below.

The AIGR summarised the harmful effects of problem gambling under the following headings (described in New Zealand Department of Internal Affairs, 1995, p. 120):

- Individual mental health
- Relationships, marital and family
- Financial
- Employment and productivity
- Related legal problems/offences

Dickerson, McMillen and Hallebone et al. (1997, pp. 106-107) suggested: "'Harm' could be approximately classified in terms of the following categories where impacts arise fairly directly from the gambling itself:

- Intrapersonal: impacts that distress the player, him or herself.
- Interpersonal: impacts that distress or disrupt relationships; particularly the player's family, social obligations relinquished.
- Financial: gambling expenditures exceed what the player can afford.

Two further categories exist where the impacts are more indirect:

- Vocational: participation in gambling activities is associated with lost productivity, absenteeism or job loss.
- Legal: illegal activities are undertaken by the player to resource their continued participation in gambling activities."

The Productivity Commission (1999, p. 6.4) provides a list of characteristics associated with problem gambling under the following headings (most of which relate to harm of some sort) which extend the adverse consequences beyond the individual:

- "*Personal and psychological characteristics*, such as difficulties in controlling expenditure, anxiety, depression, thoughts of suicide or attempted suicide, use of gambling as an escape from boredom, stress or depression; thinking about gambling for much of the time; and giving up formerly important social or recreational activities in order to gamble.
- *Gambling behaviours*, such as chasing losses, spending more time or money on gambling than intended and making repeated but failed attempts to stop gambling.
- *Interpersonal problems*, such as gambling-related arguments with family members, friends and work colleagues; relationship breakdown, or lack of time with the family.
- *Job and study problems*, such as poor work performance, lost time at work or studying, and resignation or sacking due to gambling.

- *Financial effects*, such as large debts, unpaid borrowings, and financial hardship for the individual or family members (either in the present, in the case of high gambling commitments out of current earnings, or in the future, in the case of assets that are liquidated to finance gambling).
- *Legal problems*, such as misappropriation of money, passing bad cheques, and criminal behaviour due to gambling."

The origin of harms is almost always financial problems. The Productivity Commission does note that the primary source of the problem is likely to be "financial loss (and the context in which these have been made)". Similarly, Dickerson and Baron (2000, p. 1149) find "[i]t is difficult to reject the premise that the erosion of a person's ability to control their time and money expenditure on gambling is central to a psychological understanding of the origins of harm that can arise".

Chapter 7 of the Productivity Commission Report discusses the impacts of problem gambling in more detail and Chapter 10 discusses broader community impacts. A survey commissioned by the Productivity Commission (1999, p. 10.1) found that around 70 per cent of Australians (including a substantial majority of regular gamblers) thought gambling does more harm than good to the community. The Productivity Commission National Survey conducted in 1999 and the ACT Gambling Survey (Tremayne, Masterman-Smith and McMillen, 2001) led to a calculation of the number of people experiencing a number of adverse impacts from gambling:

- Went bankrupt
- Adversely affected job performance (sometimes to always)
- Changed jobs due to gambling
- Crime (excluding fraudulently written cheques)
- Trouble with the police
- Appeared in court
- Prison sentence
- Break-up of a relationship
- Divorce or separation
- Violence
- Suffered from depression (often to always)
- Seriously considered suicide
- Attempted suicide
- Completed suicide

Stage One Report of the Study of Clients of Problem Gambling Services (2003, p. 49) lists effects of problem gambling behaviour reported by clients, family members and service providers:

- Poor work performance/study performance
- Unemployment
- Debts/bankruptcy

- Loss of housing, poorer nutrition, poorer hygiene
- Increase in criminal related offences (especially domestic violence)
- Health related problems
- High rates of divorce/separation
- Increased sexual risk-taking behaviours
- High rates of suicide ideation or suicide
- High levels of co-morbidity with substance/drug abuse
- High levels of co-morbidity with psychological disorders

Importantly, the *Study of Clients of Problem Gambling Services* (2003, p. 54) found commonality between the language of clients of problem gambling services and service providers in assessing the consequences of problem gambling. The study makes the point that the shift in emphasis away from problem gambling behaviours to the consequences of gambling could overcome some of the limitations imposed by existing assessment and diagnostic instruments. People's own experiences need to be valued: "The very subjectivity of the consequences of gambling for individuals and their families, and the ways in which gambling variously and discretely impacts upon people's lives, needs to be taken as seriously as any statistical quantitative assessment tool when treating problem gambling."

Zapelli (2003, p. 24) in a report prepared for the Western Australian Department of Racing, Gaming and Liquor found that problem gamblers would go to any lengths to avoid treatment but could not identify why this was so. Many problem gamblers experienced a deep sense of hopelessness and suicidal thoughts. In many cases, partners or family members insisted they seek help. The triggers that led problem gamblers to seek assistance typically included all, or a combination of the following:

- The loss of all money and most or all assets;
- The loss of partner or family (or impending loss);
- Having been caught stealing;
- Having lots of bills that they have no hope of paying;
- Having all their credit cards at their limit.

Lists of potential harms might suggest strategies that need to be in place to assist those experiencing harms, but of themselves, they do not contribute to a definition of gambling related harm or harms that can be used for the purposes of measurement, prediction and evaluation.

5.3 Harm minimisation

Although there seem to be few definitions of gambling-related harms, there is considerable discussion, if not precise definitions, of the concept of 'harm minimisation'. The concept of harm minimisation was initially adopted as a public health strategy to ameliorate the adverse consequences of substance use arising from addictive behaviours (Blaszczynski, 2001). Blaszczynski notes that there is no agreement in the addiction literature as to the definition of the term but quotes as a useful operational definition, the term used by the Centre for Addiction and Mental Health, Ontario, Canada:

> *"Harm reduction aims to decrease the adverse health, social, and economic consequences of [gambling] without requiring abstinence (but without ruling out abstinence in the longer term, if this is the client's choice). Harm reduction is pragmatic and humanistic, focussed on harms and on priority issues."*

The Canadian Public Health Association (2000, p. 2) uses a similar definition - but one which recognises gambling as a community health issue - adapted from a policy paper of the Canadian Centre on Substance Abuse:

> *"Harm reduction refers to a policy or program directed towards minimizing or decreasing the adverse health, social and economic consequences of gambling behaviour for individuals, families, communities and society. A harm reduction strategy does not require abstention from gambling".*

Blaszczynski (2001, p. 7) describes a three-tiered approach to harm minimisation that has been applied in the gambling context across international jurisdictions:

- Primary prevention: Strategies to protect participants from developing gambling problems.
- Secondary prevention: Limiting the potential for problems to arise and containing the impact of gambling once it has commenced.
- Tertiary prevention: Reducing the severity of existing problems and prevention of relapses.

Delfabbro and LeCouteur (2003, pp. 96-121) discuss particular interventions at each of the primary, secondary and tertiary levels in Australia and New Zealand. However, Blaszczynski (2001, p. 7) notes there is little credible research data on the effectiveness of specific interventions.

Dickerson, McMillen and Hallebone et al. (1997, p. 107) recognise the importance of context in determining whether an impact arising from gambling is harmful:

> *"'Harm' is essentially a value judgement made by individuals, by families and by the community. What is judged to be harmful for an individual will depend very much on social norms and will vary according to gender and the lifecycle of the individual. The harm that might arise from the expenditure of time and money on gambling will vary greatly according to the roles and responsibilities associated with different stages and ages in a person's life, and with the values and traditions of their particular cultural group. Where the individuals and families involved live in a society with diverse cultural values and expectations then it will be more difficult, for researchers and service providers, to discern the nature and extent of 'harm'".*

However, Svenson (undated) is critical of Dickerson's advocacy of harm minimisation strategies arguing that little support was provided in Dickerson, McMillen and Hallebone et al.'s report for the approach. He further argues that Dickerson, McMillen and Hallebone et al.'s (1997, p. 111) statement to the effect that 'what constitutes problem gambling will vary from context to context, from group to group, from individual to individual' reinforces the industry notion that gambling is an individual rather than a social problem, and it would prevent regional and intertemporal comparisons, making prediction and evaluation of harm minimisation measures impossible. Conversely, Hing (2000, p. 100) suggests that a harm-based definition lays the responsibility for problem gambling with industry and government. Amies (1999, p. vi) thought the harm minimisation approach has the potential to encourage a preventive approach similar to those adopted by the Commonwealth and States in relation to other addictions. However, she was of the view that, rather than dealing with the adverse

consequences once they had arisen, it might be more productive to address problem gambling or prevent it from emerging.

Others are also concerned with the vagueness of the notion of harm(s). A number of stakeholders made critical comments with respect to the concept of harm minimisation in submissions to a review of gambling by the NSW Independent Pricing and Regulatory Tribunal (IPART, 2004, pp. 24-25). IPART quotes the NSW Industry Operators Group and the Australasian Gaming Machine Manufacturers Association:

> *"'harm minimisation' cannot have any real meaning in gambling regulation unless some specific harm can be identified and demonstrated to be effectively minimised or reduced by the process"*;

and the University of Sydney Gambling Research Unit's (USGRU) submission:

> *"There is confusion and lack of consistency in the use of the term 'harm minimisation' with a number of measures being more appropriately defined as primary prevention and education programs. It remains unclear whether harm minimization strategies are designed to target vulnerable subgroups or are intended to exert an impact across the board. Current measures variably target the population of problem and/or recreational gamblers".*

5.4 Harm as a community health issue

Some of the literature highlights the adverse consequences of problem gambling as a public health issue and advocates a public health framework with respect to harm minimisation. The public health frame is similar to the biopsychosocial model in that it moves beyond gambling as an individual behaviour but goes further in that it focuses broadly on gambling in society; it does not just focus on problem and/or pathological gambling, and it emphasises prevention and harm reduction with respect to problem gambling. The community health approach explores biological, behavioural, socio-economic, cultural and policy determinants of gambling (Korn, 2001; and Korn, Gibbins and Azmier, 2003, p. 239 and pp. 246-47). Although it addresses problems faced by problem gamblers it also focuses on improving the quality of life of families and communities affected by gambling (Canadian Public Health Association, 2000).

Korn (2001) states that healthy gambling sustains or enhances one's sense of well-being. Korn, Gibbins and Azmier (2003, p. 24) make use of definitions of healthy and unhealthy gambling that build upon the WHO definition of health:

> *"Healthy gambling entails informed choice on the probability of winning, a pleasurable gambling experience in low risk situations, and wagering in sensible amounts. Conversely, unhealthy gambling refers to various levels of gambling problems"*

where 'gambling problems':

> *"… reflect all patterns of gambling behaviour that compromise, disrupt or damage personal, family or vocational pursuits, and that lead to adverse consequences".*

A summary of the Second Women and Gambling Conference (Women and Gambling, 2003, p. 23) makes the point that a community health approach requires changes in environment as well in individual behaviours, as change is difficult in an environment that encourages continuation of the same activities.

The Canadian Inter-Provincial Task Force on Problem Gambling (Ferris, Wynne and Single, 1999, p. 4.1.3) focused most prominently on problem gambling as a community health issue arguing that it is at the community level that the cumulative effects of problem gambling are profound. In developing the CPGI, they sought a more holistic approach to problem gambling than the medical approach encapsulated in DSM-IV and SOGS although the CPGI was to encompass the medical approach within the broader framework which was to also include some sense of the broader social context of gambling problems.

Certainly, a survey of the gambling patterns of South Australians (Taylor, Grande, Gill, Delfabbro, Glenn, Goulding, Weston, Barton, Rogers, Stanley, Blandy, Tolchard, and Kingston, 2001, p. 9) found that those South Australian who were identified as problem gamblers had issues with implications for community health. Problem gamblers demonstrated significantly higher rates of:

- poor to fair general health;
- smoking and alcohol use;
- mental health issues than both frequent gamblers and the general population; and
- a significant impact of gambling on their personal life.

The Australian Gaming Council (2004, p. 6) also advocates a public health perspective with reference to harm minimisation. They define harm minimisation measures as responsible gaming or treatment strategies and state that the framework for harm minimisation should establish clear objectives, criteria and principles against which to assess measures (Australian Gaming Council, pp. 3-4). The Australian Gaming Council draws on Korn and Shaffer's objectives for public health policy in gambling (1999, p. 289 quoted on pp. 7-8):

> - "**Prevent** gambling-related problems in individuals and groups at risk of gambling addiction,
> - **Promote** informed and balanced attitudes, behaviours and policies towards gambling and gamblers both by individuals and by communities, and
> - **Protect** vulnerable groups from gambling-related harm".

A range of strategies by which the industry can promote responsible gambling as defined in the Reno model: "policies and practices designed to prevent and reduce any potential harms associated with gambling; these policies and practices often incorporate a diverse range of interventions designed to guarantee consumer protection, community/consumer awareness and education, harm minimisation and effective access to efficacious treatment" are discussed; in particular the strategies are measures "to reduce the rate of development of new cases of gambling related disorders".

5.5 Responsible gambling and harm minimisation

Recent public policy and industry efforts in Australia have been focused on responsible gambling. The issue with respect to harms is important as many Australian States are attempting to implement responsible gambling strategies, one of the objectives of which is to minimise the adverse impacts of gambling, in addition to putting in place strategies to address the problems of those who are already experiencing harms as a result of gambling. There is no agreed operational definition defining the parameters of responsible gambling or informing appropriate strategies for the prevention of harm (Dickerson, 1998, pp. 33-42 quoted in Blaszczynski, 2001, p. 3). The aims of responsible gambling are twofold:

- *"To protect and prevent individuals from developing gambling problems in the first place; and*
- *To assist existing problem gamblers by:*
  - *Providing relevant protective measures against continued loss of control/excessive gambling*
  - *Offering effective treatment/rehabilitation services".*

The *New Zealand Gambling Act 2003*, p. 22 also defines responsible gambling:

> *"responsible gambling means lawful participation in gambling that is-*
>
> *(a) Lawful, fair and honest; and*
>
> *(b) conducted-*
>
> *(i) in a safe and secure environment; and*
>
> *(ii) without pressures or devices designed to encourage gambling at levels that may cause harm; and*
>
> *(iii) by informed participants who understand the nature of the activity and do not participate in ways that may cause harm."*

A summary of research commissioned by the Australian Gaming Council and carried out by Hing and Dickerson (2002) which examined legislation and codes of practice around Australia on responsible gambling practices found that responsible gambling legislation and regulation varies greatly across Australia. Responsible gambling practices were examined in four groups: consumer protection, consumer education, harm minimisation and treatment. Hing and Dickerson (2002, p. 3) note: "Harm Minimisation measures are also part of a public health strategy. These aim to reduce the consequences of irresponsible gambling without necessarily reducing gambling". However, they also note that sound research needs to link program effectiveness to outcomes, and that there has been none done to date to provide conclusive evidence of the effectiveness of the responsible gambling measures identified in their report.

Hing and Dickerson identified the gaps in responsible gambling strategies under four headings. Of most interest here are the gaps in harm minimisation and treatment. Gaps in harm minimisation strategies occur in the following areas: access to ATMs and EFTPOS, cheque cashing, payment of winnings, display of clocks, design of gaming rooms, gambling by staff, gambling by intoxicated persons and EGM restrictions. Gaps in treatment occur in the areas of exclusion and direct counselling. Hing and Dickerson also suggested directions for future research that are relevant to harm minimisation. These include examining, and where appropriate, applying, strategies that have been effective in other public health campaigns, strategies that target the types of gamblers already to be known at risk such as continuous gamblers, and analysis to determine why there are differences in problem gambling between states and sectors.

6. Definitions of problem gambling, responsible gambling and harm minimisation by jurisdiction

Often, it is the legislation rather than the literature which comes closest to providing "definitions" of gambling related harms, harm minimisation and responsible gambling. Some of these "definitions" are examined below by jurisdiction. Hing and Dickerson (2002), Banks (2002) and Drabsch (2003) have reviewed some of the legislation and voluntary practices related to responsible gambling.

6.1 Queensland

Queensland appears to have the most developed responsible gambling strategy of all Australian jurisdictions and as a consequence has gone further in developing definitions than have other States. Queensland has explicit definitions of problem gambling and responsible gambling, the latter incorporating the concepts of social responsibility and informed choice (Queensland Treasury, February 2002, p. 3):

> *"Problem gambling exists when gambling activity results in a range of adverse consequences where:*
>
> - *The safety and wellbeing of gambling consumers or their family or friends are placed at risk, and/or*
> - *Negative impacts extend to the broader community."*
>
> *"Responsible gambling occurs in a regulated environment where the potential for harm associated with gambling is minimised and people make informed decisions about their participation in gambling. Responsible gambling occurs as a result of the collective actions and shared ownership by individuals, communities, the gambling industry and Government to achieve outcomes that are socially responsible and responsive to community concerns."*

The *Gambling Legislation Amendment Bill* (passed on 31 August 2004) defines a problem gambler for legislative purposes:

> *" "**problem gambler"** means a person whose behaviour indicates a compulsion to gamble, an addiction to gambling, or an inability or disinclination to make rational judgements about gambling."*

The *Responsible Gambling Code of Practice* (2002) is a voluntary code designed to promote harm minimisation through responsible gambling practices by encouraging "… the creation of gambling environments which minimise any potential harm to gamblers, their families, friends and local communities". Although, responsible gambling has not been enshrined in legislation, *the Gaming Machine Act 1991* has as one of its objects (section 1A) "minimising the potential for harm from gaming machine gambling". Similar objects are inserted into other gambling legislation in Queensland including the *Charitable and Non-Profit Gaming Act 1999*, the *Keno Act 1996*, the *Interactive Gambling (Player Protection) Act 1998*, the *Lotteries Act 1997*, the *Wagering Act 1998* and the *Casino Control Act 1982* (Drabsch 2003:22).

Queensland Treasury (2003, p. 36) describes a number of provisions in Queensland's gambling legislation that are intended to minimise harms. These include advertising restrictions, prohibition on credit betting, exclusion provisions, maximum wager controls, and restricting the times that certain gaming venues operate.

6.2 New South Wales

NSW has a dozen Acts related to gambling most of which are administered by the Minister for Gaming and Racing. One rationale underlying many of these Acts, *inter alia*, is the need to minimise the social and personal harm associated with gambling. Section 3 of the *Gaming Machines Act* (2001) sets out its primary objects as being:

> *"a. gambling harm minimisation – that is, the minimisation of harm associated with the misuse and abuse of gambling activities, and*
>
> *b. the fostering of responsible conduct in relation to gambling".*

Thus, the *Gaming Machines Act* contains what is close to a definition of harm minimisation although it pushes the definitional question back to one of defining harm.

The NSW Department of Gaming and Racing attempts to minimise the harm associated with problem gambling in four ways: through a regulatory framework, industry education and information, targeted enforcement, and a safety net program to assist persons who have a gambling problem, or those who are affected by the activities of a problem gambler (Drabsch, 2003, p. 36).

6.3 South Australia

South Australia also adopts a harm minimisation approach to gambling. Section 11 of the *Independent Gambling Authority Act 1995*, in particular sections 11(1)(aa), 11(1)(aab), and 11(2a)(a) sets out the functions of the Independent Gambling Authority including development and promotion of strategies for minimising the incidence of problem gambling and preventing or minimising the harms caused by gambling. However, the *Authorised Betting Operations 2000* comes closest to providing definitions; it allows for the barring of excessive gamblers (section 50): "[i]f the holder of the major betting operations license is satisfied that the welfare of a person, or the welfare of a person's dependants, is seriously at risk as a result of excessive gambling …". The *Casino Act 1997* (section 44) and the *Gaming Machines Act 1992* (section 59) have similar provisions.

The provisions relating to mandatory codes of practice in each of the *Authorised Betting Operations Act*, *Casino Act*, *Gaming Machines Act* and *State Lotteries Act* are also instruments for harm minimisation.

6.4 Victoria

Legislation administered by the Minister for Gaming in Victoria includes the *Gambling Regulation Act 2003*, the *Casino Control Act 1991*, and the *Casino (Management Agreement Act) 1993*. Objectives of the *Gambling Regulation Act 2003* (section 1.1) are, *inter alia*:

> *".. to foster responsible gambling in order to*
> *i) minimise harm caused by problem gambling; and*
> *ii) accommodate those who gamble without harming themselves or others".*

However, the Act does not define problem gambling, responsible gambling, excessive gambling or harm minimisation. The Act (Section 10.3) provides for payments into a Community Support Fund out of which the Minister can direct payments be made for the prevention of excessive gambling, or for treatment of persons who gamble to problem levels. The Act also provides for payments into a Mental Health Fund.

6.5 Tasmania

The main gambling legislation in Tasmania is the *Gaming Control Act 1993*, the *Racing Regulation Act 1952* and the *TT-Line Gaming Act 1993*. The *Gaming Control Act* requires that a proportion of the profits from gaming machines be paid into a Community Support Levy, 50 per cent of which is used for gambling research, services for the prevention of compulsive gambling, treatment for compulsive gamblers, community education and other health services (Drabsch, 2003, p. 23).

6.6 Australian Capital Territory

Section 6 of the *Gambling and Racing Control Act 1999* requires the ACT Gambling and Racing Commission to, *inter alia*, monitor and research the social effects of gambling and problem gambling; provide education and counselling services so as to promote consumer protection, minimise the possibility of criminal or unethical activity, and reduce the risks and costs of problem gambling to the community and to the individuals concerned. The *ACT Gaming Industry Code of Practice* provides minimum standards of harm minimisation for all gambling providers. The *Gambling and Racing Control (Code of Practice) Regulations 2002 No. 28* (Section 2) defines a person who has a gambling problem by means of examples and behaviours related to harms:

> *"(1) … a person has a **gambling problem** if the person cannot manage properly the person's gambling activities.*
>
> ***Examples of signs that a person has gambling problem***
>
> *1. Admitting being unable to stop gambling or to gamble within the person's means*
>
> *2. Expressing concern about the amount of time or money the person spends on gambling*
>
> *3. Acknowledging the person spends on gambling money needed for day-to-day living expenses, including for dependants*
>
> *4. Having a disagreement with a family member or a friend about the person's gambling behaviour.*
>
> *(2) Also, a person is taken to have a **gambling problem**, if the person engages in any of the following behaviour:*
>
> *(a) seeking credit for gambling unless authorised under a gaming law;*
>
> *(b) seeking to borrow or scavenge money to gamble;*
>
> *(c) seeking assistance or advice about controlling the person's gambling;*
>
> *(d) admitting to borrowing or stealing money to gamble."*

6.7 Northern Territory

The *Northern Territory Code of Practice for Responsible Gambling* has a specific definition of responsible gambling:

> *"Responsible gambling is a broad concept and involves the conduct of gambling in a manner whereby the potential for harm associated with gambling is minimised".*

The Code also contains a definition of problem gambling and lists some of the negative consequences that problem gambling might give rise to:

> *"Problem gambling exists when there is a lack of control over gambling, particularly the scope and frequency of gambling, the level of betting and the amount of leisure time devoted to gambling. The negative consequences of problem gambling may include:*

- *The gambler suffering excessive financial losses relative to the gambler's means;*
- *Adverse personal effects on the gambler, his or her family and friends;*
- *Adverse effects on employers and work performance; and*
- *Other costs which are borne by the community."*

The *Gaming Control Act* provides for a Community Benefit Fund from which funds are applied to research into gambling activity, including the social and economic impact of gambling on individuals, families and the community and promotion of community awareness and education in respect of problem gambling and provision of counselling, rehabilitation and support services for problem gamblers and their families in the Territory.

6.8 Western Australia

The Western Australian gaming legislation covers the *Casino (Burswood Island Agreement) Act 1995*, the *Casino Control Act 1984*, and the *Gaming Commission Act, 1987*. The regulations in these Acts reflect the particular attributes of gaming and the assessment that where these issues are concerned (The Western Australian Gaming Legislation 2002:1):

- the market will generally fail to protect the interests of consumers;
- will be unable to ensure the limitation of criminal activities; and
- will encourage unacceptably high levels of gambling in the community with associated social costs.

Other Acts in Western Australia that cover gambling include the *Betting Control Act 1954*, the *Racing and Wagering Western Australia Act 2003*, and the *Racing and Wagering Western Australia Tax Act 2003*.

Western Australia has a Problem Gambling Support Services Committee that aims to:

- promote the concept of minimising harm from problem gambling in the community;
- provide direction to the gaming industry and the public to minimise problems associated with gambling behaviour;
- identify and determine the appropriate support services for people with gambling related problems; and
- facilitate the provision of support services for those affected by gambling related problems in Western Australia.

7 Review of measures of problem gambling

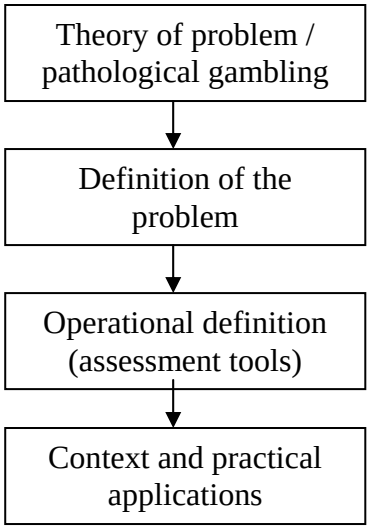
7.1 Overview: Putting theory into practice

Although considerable controversy clearly exists concerning the most appropriate definition of problem or pathological gambling, there is nonetheless a strong belief that this disorder exists. Within society there is a substantial minority of people whose gambling behaviour differs substantially in terms of its frequency, nature and consequences. However, while definitions may be a useful way of conceptualising or describing many of the behaviours and/or the consequences characteristic of problem gambling, there is also a need to operationalise these concepts so that they can be applied in practice. In other words, what are the specific factors that allow one to distinguish a problem gambler from a non-problem gambler? How can this information be used to ascertain the extent of problem gambling in the general population, or to identify those who genuinely need help?

Accordingly, the purpose of this chapter is to consider how researchers have attempted to address these questions. As will be outlined below, the general strategy has been to develop specialised psychometric instruments or assessment tools that can be administered to either self-reported problem gamblers, or to populations of people where problem gambling might be present. Scores or ratings obtained using these assessment tools are then used to distinguish those with the disorder from those not so affected. It will be argued that the development of measurement tools should ideally follow the schematic diagram depicted in Figure 1, in which broader theoretical understandings of problem gambling and related definitions give rise to assessment tools that try to capture the essential elements of the disorder in different contexts. However, as will be shown, there is considerable controversy concerning the extent to which most measurement tools have been able to achieve this ideal.

In order to provide a comprehensive coverage of these issues, the chapter is divided into four principal sections. In the first section, a brief overview of the purposes of assessment tools is provided along with a discussion of some of the principal terminology used in the field. The second section provides a comprehensive review of the principles of psychometric measurement. Although much of this is covered to varying degrees by previous reports (e.g., Ben-Tovim, Esterman, Tolchard and Battersby, 2001; Thomas, Jackson and Blaszczynski, 2003; McMillen, Wenzel and Ahmed, 2004), this summary attempts to bring together all these points in a single report. The third and longest section of the chapter critically evaluates the validity and reliability of approximately 20 published assessment tools relating to problem gambling and associated harms. In the final section, the results of a detailed literature search are presented to provide a comprehensive overview of current usage patterns for all of the most widely used measures.

Figure 7.1
The schematic links between theory and practice



7.2 Two forms of assessment: Psychometric tools vs. diagnostic interviews

Throughout this chapter, the term psychometrics and diagnosis will often be used in the same sentence, so it is important to differentiate between these two terms because not all psychometric tools are methods of diagnosis, and vice versa. A psychometric tool is a conceptual device (usually comprising a set of scored items) that attempts to quantify a particular construct so that one can describe variations in numerical terms. Such instruments are usually filled out by gamblers themselves, or administered by laypeople according to a specified set of instructions. In many cases, these instruments are diagnostic to the extent that certain quantitative thresholds are taken to indicate the presence or absence of the disorder. By contrast, there are diagnostic methods of assessment that do not merely involve a pencil and paper test. Ideally administered under controlled conditions, this second type of assessment is usually only undertaken by appropriately skilled clinicians. In these assessments, endorsement of specific items occurs only after careful consideration and elaboration of the client's responses, and the presence of the disorder is only confirmed when a specified number of key characteristics has been identified to the satisfaction of the clinician. In some reports (e.g., Ben-Tovim, Esterman and Tolchard et al., 2001), it has become common to refer to these sorts of assessment as 'the gold standard' of assessment, and a reference point against which all other assessments should be compared. However, as will be outlined below, even these methods may be fallible, especially if there are limitations in the content of the assessment criteria, or variations in their interpretation.

7.3 The purposes of assessment

There are a number of reasons why assessment tools developed and these have been identified in numerous published papers. However, in order to maintain continuity with recent Australian reports, a summary of recent views is provided in Table 7.1.

Table 7.1
Recently cited purposes for gambling assessment methods

Productivity Commission (1999)	**Jackson et al. (2003)**	**McMillen et al. (2004)**
To determine who needs help. The extent of public health risks in the population. A screening test in clinical and counselling settings. To estimate costs.	Current Diagnostic: who currently has the problem? Predictive diagnostic purpose: who is at risk of developing the problem? Current severity purpose: How severe is the problem and its consequences? Intervention design purpose: What is needed to treat the problem? Screening purpose: to refer the person for more formal diagnosis.	Current diagnostic: the current extent of the problem in the community. Predictive diagnosis: To ascertain who is at risk in the community. Therapeutic diagnosis: What needs to be done to help people?

As indicated in Table 7.1, different researchers have provided similar, but slightly varying lists. Although these lists are generally sound, a difficulty is that the dimensions that potentially differentiate different measurement strategies or tools are not clearly defined. The same function (e.g., diagnosis) is repeated twice but in relation to different contexts, whereas different contexts are mentioned without reference to all the possible applications that might apply in those contexts. For example, it would be possible to screen gamblers in any number of contexts (either the community, clinical populations or both), so screening should not be listed as being separate from the different contexts. Therefore, to assist in the development of a clear typology of measurement tools, it may be conceptually easier to differentiate the four principal functions of assessment methods from the different contexts in which they might be applied.

7.3.1 Context: Community, research or clinical/counselling settings

Assessment tools can be applied in multiple contexts. One common context is in the general population, as in the example of prevalence studies conducted either by telephone or door-knock surveys. A second example is in research studies where one might want to compare groups of gamblers classified or diagnosed as having (or not having) the disorder. A third context is in treatment, counselling or clinical settings where one desires to determine how many people presenting for a service genuinely have the disorder. On some occasions, the clients might be specifically referred because of problem gambling, whereas on others the population of interest might comprise a group of people thought to be particularly likely to have gambling problems (e.g., substance abuse treatment centres, or correctional populations). In these different contexts, the purpose of the assessment is likely to differ. Whereas prevalence may be largely focused on determining broad trends in problem gambling in the community, clinical assessments may be designed to enhance strategies for assisting people with multiple difficulties, or determining the most appropriate course of treatment. Another principal difference between these different populations is the base-rate of the phenomenon. In community prevalence surveys, the base-rate is usually very low (only 1-2% of the population), whereas this rate can be as high as 30-40% in some clinical populations. This means that measurement tools may, in some contexts where problems are more common, have to do a lot more to differentiate valid cases from those who only have a lesser degree of the disorder.

7.3.2 Identification function

The first principal function of a measurement tool is to identify examples of the phenomena (problem or pathological gambling). In other words, the issue of which individuals should be classified as valid examples of the disorder and which should not is worthy of greater attention. As indicated by Thomas, Jackson and Blaszczynski (2003), the process of identification can be undertaken in either one of two ways, or in two stages. One form of identification involves what are termed *screening tools*, whereas the other involves *diagnosis*. *Screening*, which may often be undertaken in the first stage of an assessment, involves the identification of cases that are likely to receive a positive diagnosis when subjected to more stringent testing. On the other hand, *diagnosis* refers to the formal process whereby a person is classified as a definite example of the disorder. Although the term diagnosis is often used in the context of community prevalence studies (as in Table 1 above), it is most strongly associated with the implementation of a formal or 'gold standard' clinical interview of the form described above (e.g., as might be derived from the Diagnostic Statistical Manual for Psychiatric Disorders, DSM-IV). In other words, one can really only classify people as problem gamblers using a simple psychometric instrument; one cannot diagnose them.

7.3.3 Classification function

In the case of screening tools, one may also wish to do more than merely classify people into two categories: those with the disorder vs. those without it. As discussed above in the chapters on the definitions of problem gambling, some researchers (particularly in Australia, e.g., Dickerson, McMillen and Hallebone et al., 1997) hold the view that problem gambling may lie on a continuum, so that one can differentiate between severe, moderate, and less severe cases. Another interest has been to differentiate between those who have the disorder and those who are 'at risk' of having the disorder. This latter terminology is often confusing in that the term 'at risk' can be used in more than one way. On one hand, 'at risk' can be used in the present tense to refer to individuals who currently have a lesser degree of the disorder. On the other, it can also refer to those who (at whatever current level) are likely to become positive cases in the future. Thus, there are potentially four classification methods that can be applied to individual cases: (1) Case vs. Non-case, (2) Categorical Levels of Severity, (3) Case vs. At risk (partial problem) vs. No problems, and (4). Case vs. Potential future case, and even these methods are not entirely mutually exclusive.

7.3.4 Descriptive function

Another point that will be clear from the discussion of definitions is that problem gambling can be defined either in terms of its consequences or the behaviour itself. As indicated above, consequences can be psychological, social, financial, vocational, or legal, and usually a combination of all of these. These consequences are not components of the pathology or disorder itself, but arise from it, and can be used to infer that a person is engaged in a range of behaviours that tend to lead to undesirable consequences. It is clear that some measures and definitions have concentrated largely on the consequences of gambling (e.g., Dickerson, McMillen and Hallebone et al., 1997), whereas others have been concerned with behaviours. This indicates that the definition that one adopts will clearly play an important role in the relative prominence ascribed to consequences and behavioural items in assessment methods. Some measures with a strong focus on consequences may be able to provide only limited insights into the behaviours that led to those consequences arising.

7.3.5 Therapeutic function

As Thomas, Jackson and Blaszczynski (2003) correctly assert, a further important purpose of assessment tools is to assist in the process of therapeutic change. In a general sense, any tool that successfully identifies true cases in the population may influence treatment to the extent that it enhances government policies relating to problem gambling, or the funding allocated to treatment services. However, within the treatment context itself, there is a need for instruments that provide clinicians and counsellors with a clear description of the types of problem that must be addressed, and the sorts of intervention that might be most effective. For example, does the gambler need financial or legal assistance; is their behaviour still out-of-control; are their family and occupation affected? In addition, an assessment tool will be most useful in this context if it can be used as an effective gauge of therapeutic change. Will it be possible to determine whether a given problem gambler has responded to the intervention that has been provided? Thus, from a therapeutic viewpoint, there is a need for assessments that provide a comprehensive and useful profile of the gambler's problems, as well as a method to detect improvements or deteriorations in the gambler's status. Some assessment tools may be very effective in identifying problem gamblers, but not be able to show how treatments or interventions affected the gambler over time.

Table 7.2
Purposes of assessment methodologies and critical dimensions

Dimension	**Options available**
Context	General community Research with gamblers Clinical / Treatment populations
Identification function	Screening tool Formal Diagnosis
Classification Function	Case vs. Non-cases Levels of Problem Severity Current public risk vs. Predicted risks
Descriptive function	Problem gambling Consequences/ Harms
Therapeutic function	Problem assessment (assistance required) Index of therapeutic change

Table 7.2 summarises the dimensions governing the selection of assessment methodologies. As can be observed, it is possible to combine any or all of these options across the different dimensions. In practical terms, these dimensions may not be entirely independent, in that certain options across different dimensions tend to go hand in hand (e.g., therapeutic change is more important in clinical settings). Nevertheless, the table may provide a useful checklist of options to consider when selecting the most appropriate assessment method for a particular context. For example, a clinician interested in the diagnosis of pathological gambling would choose a method best suited for diagnosis. He or she would then choose whether it was necessary to differentiate level of severity or only cases in general. Consideration would then be given to whether he or she wanted to describe gambling behaviour, its consequences or both. A final stage would be to select the instrument that is most effective in being able to detect therapeutic change (if this is desired). By contrast, a public health researcher might make quite different choices. The interest might instead be to understand the varying degrees of problem gambling in the general population using a screening instrument to classify cases; to assess the magnitude of harms being experienced, and the types of services that should be funded.

7.4 Characteristics of effective assessment methods

In recent years, a number of reports and papers have critically reviewed the characteristics thought to be essential for effective assessment methodologies (e.g., Battersby, Thomas, Tolchard and Esterman, 2002; Ben Tovim, Esterman, Tolchard and Battersby, 2001; Dickerson, 1999; Dickerson, McMillen and Hallebone et al., 1997; Thomas, Jackson and Blaszczynski, 2003; Lesieur, 1994; McMillen, Marshall, Wenzel and Ahmed, 2004; Orford, Sproston, and Ehrens, 2003; Walker and Dickerson, 1996). Although, once again, there is some variation in the points raised and in the degree of emphasis afforded to specific characteristics, all authors share the fundamental assumption that assessment methodologies must possess several critical characteristics: reliability, validity, practicality, applicability, and comparability (see Thomas, Jackson and Blaszczynski, 2003).

7.4.1 Reliability

In general terms, the term reliability refers to the consistency of assessment. If the true magnitude of a quality is held constant, then a reliable assessment methodology should yield almost the same result on each occasion. One form of reliability, referred to as test-retest reliability, refers to the similarity of scores on repeated administrations of the assessment over time. Another form, inter-rater reliability, refers to the similarity of scores or ratings obtained from multiple sources (e.g., the problem gambler and someone close to them). A third form, inter-item reliability or internal consistency refers to the strength of the relationship between different items in the same assessment tool. A coherent assessment tool should contain items all of which are measuring approximately the same construct, so that scores on each individual item should be at least moderately correlated with the total score for the assessment. In all these examples, correlation coefficients (0.0 - 1.0) are used to indicate the degree of reliability, although various other correspondence and association statistics, as well as comparison methods, are available. In assessments of internal consistency, for example, Cronbacch's alpha is usually used, with values of 0.70 or greater taken to indicate appropriate internal reliability.

7.4.2 Internal validity

Internal validity refers to the extent to which the measure is genuinely capturing the construct under consideration. In other words, is the assessment a true measure of problem gambling (or whatever term is used) and able to differentiate between those who do and do not have this quality? Internal validity is usually confirmed using a variety of different strategies and in the context of a number of related terms, each of which is described and defined below.

a. Construct validity

Construct validity refers to the extent to which the items capture the true nature of problem or pathological gambling. As outlined in Figure 1, most measures of problem gambling are (or should be) governed by an underlying logic or framework or theory about the true nature of the disorder. Thus, when attempting to differentiate between cases and non-cases, it is reasonable to suppose that designers have in their minds some sense of a "characteristic" problem gambler, or how problem gambling might be defined. Unfortunately, as will be clear from the above discussion of definitions, there is considerable disagreement concerning the appropriate theory or model of problem gambling that should be adopted. One of these debates relates, for example, to whether problem gambling should be considered: (1) a

pathology or a genuine addiction as per drugs or alcohol with a genuine physiological mechanism, or (2) the result of environmental factors (e.g., exposure to family and social situations that encourage gambling), or (3) the result of poor decision-making, or (4) the interaction between individual vulnerabilities and environmental factors, e.g., the behaviour of anxious and depressed people becoming conditioned to the various schedules of reinforcement and stimuli provided by gambling venues. Indeed, as discussions of Blaszczynski and Nower's (2001) pathway model would suggest, it may be that all of these views are correct depending upon the particular subgroup of problem gamblers to which one refers.

Another debate concerns the differentiation between the disorder itself and its consequences. As discussed above, some recent definitions of problem gambling in Australia (e.g., Dickerson, McMillen and Hallebone et al., 1997) refer almost entirely to the harms or consequences resulting from excessive gambling. However, as Walker (1995) points out, these consequences are not the disorder itself, but only the symptoms of it. Dickerson, McMillen and Hallebone et al. (1997, p. 3) justify this definition on the grounds that it avoids the "pitfalls of academic dispute about the causes of problem gambling", but, as Battersby, Thomas, Tolchard and Esterman (2003) point out, there may be people with problematic behaviour who have gambled heavily for only a relatively short period, not long enough to have any significant gambling-related problems. Including only measures of harm in a definition may therefore limit the extent to which an assessment method is able to make valid assessments of the proportion of people at risk of developing gambling problems in the future.

Still another debate revolves around the extent to which problem gamblers are qualitatively or quantitatively different from other gamblers. One view, often given greater credence in the United States, is that problem gambling is a pathological condition and that people in this category are qualitatively different from other people. The aim of assessment is therefore to differentiate cases from non-cases. In contrast, Dickerson, McMillen and Hallebone et al. (1997) and also the Productivity Commission (1999) endorse a more continuous model, in which problem gambling is considered the extreme end of a continuum with non-gamblers at one end and problem gamblers at the other. Regular gamblers are positioned in the middle and are thought to share many of the characteristics of problem gamblers. This view is based on the notion that problem gambling is a progressive disorder in which people progress from being regular gamblers to problem gamblers, and sometimes back again (see Abbott, Williams and Volberg, 2004). If this assumption is made, a valid measure is therefore one that is able to capture the varying degrees of the problem. As will be discussed below, Dickerson, McMillen and Hallebone et al. (1997) or O'Connor and Dickerson (2003) have discussed the progression from regular to problem gambling largely in terms of a gradual impairment of control over gambling decision-making or "choices".

In summary, the construct validity of the assessment methodology will be influenced by:

- *Theoretical Model*: For example, whether one ascribes problem gambling to pathology or medical models of problem gambling vis-à-vis approaches which place greater emphasis on environmental, social or cultural factors.
- *Category vs. Continuum Approach*: Whether one is of the view that a categorical model of assessment based on the differentiation of cases from non-cases is preferable to a continuum model.
- *Definition*: Whether one believes that problem gambling is best defined in terms of its behaviour or consequences, or both.

Once again, as with the purposes described in Table 7.1, these considerations are not entirely independent, but should be considered in tandem. One could, for example, typify the American approach as favouring a pathology model that categorises people as pathological gamblers vs. non-pathological gamblers based largely upon the existence of behaviours consistent with the recognized psychiatric diagnostic criteria. On the other hand, the Australian approach (as indicated in previous chapters) tends to adopt almost the opposite view with a much stronger emphasis on the consequences of the behaviour. However, it is important to recognize that the existence of these opposing views does not rule out the possibility of being able to use a continuum model that considers behaviours rather than consequences. For example, later in this chapter, some examples of these behaviours are discussed in sections documenting measures designed to assess impaired control and gambling urges.

b. Classification accuracy

If a measure is valid, it should also be able to distinguish true cases of problem gambling from false cases. Usually in epidemiology this quality is described in terms of the sensitivity and specificity of the assessment. Sensitivity refers to the probability of a true case being classified as such within a sample of possible cases, whereas specificity refers to the capacity to avoid classifying non-cases as cases. Poor sensitivity leads to insufficient people being classified as cases (false negatives), whereas poor specificity leads to over-classifications or false positives. A good assessment is one that maximizes both qualities and therefore minimizes both types of error. In studies of gambling, this optimisation is achieved by using techniques such as ROC analysis (see Ben-Tovim, Esterman, Tolchard and Battersby, 2001) to determine the optimum cut-off score for the measure. Unfortunately, a limitation with any form of classification analysis is that it relies upon the existence of a valid reference point or "gold standard" against which to compare cases identified by the measure under consideration. At this stage, there is probably no assessment in gambling that is sufficiently well-established or incontrovertible to provide this reference point.

c. Appropriate validation samples

Another important issue in determining the validity of assessment measures is the nature of the sampling. In classifying or diagnosing a person as a problem gambler, one is making the decision that the person differs from others (non-problem gamblers) because of the presence of certain characteristics, or because of the degree to which certain characteristics are present. In such circumstances, the issue is one of discrimination, so that it is important to ensure that one has an appropriate control group. If the control group is very dissimilar from the problem gambler group (e.g., medical students) then one might find that the frequency of gambling would be enough to differentiate the two groups. One group gambles regularly, the other does so infrequently. One would not need to refer to problematic behaviour or, for that matter, gambling-related problems. Consequently, a more suitable group would be one that includes those who gamble regularly and who do not appear to have any significant gambling-related problems. In this way, one would be in a better position to highlight the critical behavioural features or problems that are particular to those who are adversely affected by gambling. Such comparisons are necessary because there may be many common behaviours (and not all desirable ones) that are also commonly observed in regular gamblers (e.g., feeling guilty, spending more than can afforded, or lying about winning) (Allcock, 1995).

d. Dimensionality

If a clear theory or logic underlies an assessment tool, it should follow that the items all relate to the same concept (whether that be problem or pathological gambling). Although internal

consistency analyses allow one to determine whether scores on various items all go in the same direction (i.e., are correlated with the total), this does not mean that the scale is conceptually coherent. For example, having a greater number of children and having a lower income might be correlated, but they are not the same thing. The extent to which an assessment relates to a single construct can be assessed using statistical techniques such as factor analysis. Ideally, the measurement tool should give rise to a single factor that explains a substantial proportion of the variability between items.

e. External validation

As McMillen, Marshall, Wenzel and Ahmed (2004) point out, another way in which to confirm the validity of an assessment is to determine the extent to which it correlates with other qualities or measures known to be related to problem gambling. It is well known, for example, that problem gambling gives rise to significant psychological and social harm (Productivity Commission, 1999). Thus, one would have greater faith in the assessment if scores or ratings were positively correlated with anxiety, depression, or other general measures of social or family functioning.

f. Concurrent validity

Another strategy for ascertaining the validity of any new assessment method is to compare the results for the new method with the results for the older and more well-established methods. If the two yield similar results, one has greater confidence that the new measure relates to the same construct. Unfortunately, an obvious limitation with this method is that it assumes that the older methods are necessarily valid. If the two assessments agree (or are highly correlated), this may be only because they contain essentially the same items, and each set may be fraught with the same omissions or limitations.

g. Item variability

Another indicator of the appropriateness of a scale is the distribution of scores for different items. Although there is no difficulty, in principle, in having items that are more, or less commonly endorsed, by problem gamblers, problems do arise if the items are unable to discriminate between problem gamblers and non-problem gamblers. As Thomas, Jackson and Blaszczynski (2003) and McMillen, Marshall, Wenzel and Ahmed (2004) point out, this occurs when items are either very rarely or very commonly endorsed. In some measures of problem gambling, there may be items that refer to behaviours that are so infrequently observed even amongst problem gamblers that almost no-one endorses the item. Scores for that item will have almost zero variability and therefore will be of little value psychometrically. At the other extreme, there may be items that are so commonly endorsed that they do not truly discriminate problem gamblers from other groups. Such items may refer to regular gamblers in general and not capture the unique features of problem gambling. Detection of these items involves inspection of the distribution, mean item and standard deviation scores for each item in the instrument, or analysis using specialised statistical techniques (e.g., Rasch models, Strong, Daughters, Lejuez, and Breen, 2004) that identify the items that most strongly influence group classifications. Items that have very high means, or very low standard deviations may need to be reconsidered or omitted.

7.4.3 Practicality

Practicality refers to the ease with which different potential users of assessment tools are able to use the assessment methodology with gamblers. Three primary issues govern this consideration. The first is the *length of the assessment.* All things being equal, a short

assessment is usually preferable to a longer one because this increases the likelihood of it being practical for multiple uses. Although some research projects and therapeutic settings may afford the luxury of a longer assessment, perhaps combining measurement with an in-person interview, service providers and those interested in screening will need a shorter, more efficient measure that can be filled out and scored relatively quickly. A second factor is *ease of administration*. Many psychiatric assessments are very complicated and require substantial training, not only to administer the assessment, but also to score and interpret it. Such methods would be entirely unsuitable in a variety of contexts where there are not qualified people with the time or resources to learn these processes. A third factor is the *cost of the assessment*. Although most existing problem gambling measures are free or public domain, others are not. Psychological and psychiatric assessment tools can be extraordinarily expensive and subject to very strict copyright provisions requiring the purchase of an extensive manual and a per page cost to administer the measures. Some also require the submission of forms and a further cost is imposed for data analysis and interpretation. Accordingly, there will be limits to the range of possible measures that might be used to assess problem gambling and gambling-related harms.

7.4.4 Applicability

Another dimension fundamental to this report (Thomas, Jackson and Blaszczynski, 2003) is the degree to which existing measures can be applied in a variety of contexts, and in different subpopulations in Australia. Most assessments are designed to be suitable for administration to the entire adult population and validated using samples supposedly representative of the full range of demographic characteristics. The only relatively minor change to ensure that the assessment can be applied to a wider range of groups (e.g., in a prevalence study) is to translate the assessment tool into different languages, and to provide an interpreter in the event that some people may find some questions difficult to understand. However, even with this provision, it is not clear whether items in the assessment are equally relevant or meaningful to different subgroups in the population. This means that some items may not be true indicators of gambling problems in subgroups, or may not attract any responses. Alternatively, the wording of the question might yield responses that are quite different from what the designer of the assessment intended. In both cases, the result may be a significant reduction in the psychometric qualities of the instrument. The assessment may no longer be internally consistent, or have the same dimensional structure. Some examples of the factors that are likely to influence item interpretation are provided below.

a. Gender

There is good evidence to suggest that women do not necessarily gamble for the same reasons as men, or on the same range of activities. In Australia, it has been found that many women gamble for different reasons than men (e.g., Di Dio and Ong, 1997; Loughnan, Pierce, and Sagris, 1996; Thomas and Moore, 2001; Scannell, Quirk, Smith, Maddern, and Dickerson, 2000; Trevorrow and Moore, 1998). Thomas and Moore (2001), for example, interviewed over 150 women in poker machine venues, and found that women are significantly more likely to gamble to escape loneliness, depression and anxiety. Men, on the other hand, are more likely to gamble to test their skills and to win money (Delfabbro, 2000). This difference is recognized in Blaszczynski and Nower's (2001) pathways model of problem gambling, in which they suggest that emotionally vulnerable gamblers are more likely to be women than men. It is also reflected in numerous prevalence studies (Productivity Commission, 1999) suggesting that women are more likely to be attracted to forms of gambling such as electronic gaming machines because it allows them to escape their worries and to relax. The existence

of these differences in motivation means that assessments may need to be differentially sensitive to the factors contributing to gambling problems in men and women. Any assessment that downplays the role of gambling as a dysfunctional coping strategy is likely to be less relevant for women, whereas assessments that place a strong emphasis on attitudes regarding the probability of winning, being able to control outcomes, and win money, are more likely to favour men. As Jackson, Thomas, Ross and Kearney (2000) point out, in their typology of items contained in the most commonly used assessment tools, attitudinal factors and items relating to money are differentially represented across the different measures thereby creating a concern that the scales might not be equally useful in male and female populations.

A second way in which gender may play a role in assessment is that many scales refer to behaviours involving the interaction between individuals (e.g., borrowing from others), or the loss of significant assets or the impairment of roles (e.g., study or occupational commitments). The inclusion of such items assumes that each of these behaviours is equally common amongst men and women. However, it is possible that there are specific gambling-related behaviours, e.g., obtaining money from loan-sharks or by selling stocks and bonds, that might not be as commonly observed amongst women as amongst men (Orford, Sprogsten and Erens, 2003). If this is so in Australia, then there is a danger that a measure administered to men may not attract the same level of endorsement from women, even if both groups are matched in terms of the severity of their gambling problems.

b. Age

A similar difficulty is associated with age. A review of all prevalence surveys in Australia showed that older people in Australia generally gamble less frequently and are less likely to have gambling-related problems than younger people (Delfabbro and LeCouteur, 2003; Productivity Commission, 1999). Apart from differences in involvement, overseas research has also suggested that older people may have different reasons for gambling, and also exhibit a slightly different range of behaviours. Frisch, Fraser and Govoni (2003), for example, found that older people in Canada were more likely to gamble to escape loneliness and depression, and suggested that issues such as these were more important than those relating to the consequences or harms associated with gambling (e.g., losing jobs, relationships). Frisch, Fraser and Govoni drew attention to a review by Volberg and McNeilly (2003) that indicated that older gamblers were less likely to engage in chasing behaviour, feel guilty, commit illegal acts, or have arguments with other people because of gambling. If these differences are also evident in Australia amongst older problem gamblers, this suggests very strongly that some existing measures may not capture many of the key elements of problem gambling amongst older people.

c. Culture

As Delfabbro and LeCouteur (2003) point out, relatively little work has been undertaken into gambling amongst other cultural groups in Australia. Nevertheless, there is a growing body of literature worldwide that suggests that subtle differences in gambling across different groups may influence the applicability of established assessment methods to different cultural groups. For example, in a study of Vietnamese people in South Australia, Zysk (2003) found that Vietnamese people have a very strong resistance to admitting to problems associated with gambling because of the strong cultural imperative “to save face” in the community. Although denial is common amongst gamblers irrespective of their culture, the particular strength of this effect in Asian communities suggests that attempts to identify problem gamblers through measures of harm may be very difficult. For this group, it may therefore be

better to infer the existence of a problem using items relating more strongly to the behaviour itself, so that the questions are not so ostensibly about problem gambling. Questions relating to the interaction between individuals, e.g., borrowing money, losing employment, or assets create other challenges. In some strongly patriarchal cultures (e.g., Middle-Eastern, some Asian cultures) such items may not have the same relevance for women as for men. This issue was, for example, raised by Duvarci and Varan (2001) in a study of Turkish gamblers, in which they drew attention to the limited relevance of items relating to borrowing from one's spouse. They pointed out that it would be highly unlikely for a Turkish man to borrow money from his wife for gambling. As they point out:

> *"Even when the wife works, her income, most of the time, is seized by the husband who has the authority within the traditionally patriarchal Turkish society."* (2001, p. 205).

They also draw attention to the fact relatively few women work or have access to assets that they could call their own, or which would be accessed to finance gambling. Another concern is that the vast majority of Turkish people rarely possess some types of assets, e.g., stocks and bonds, so that these items are only going to be endorsed by wealthier, middle-class gamblers.

It is clear that similar analyses need to be undertaken with specific cultural groups in Australia, and most importantly, with Indigenous gamblers to determine whether motivations for gambling, the gambling itself, and the pattern of consequences, conforms to the assumptions governing existing gambling assessments. For example, one concern relating to the administration of existing assessments to Indigenous gamblers is that items relating to borrowing from others may not necessarily be indicative of gambling-related problems because this behaviour is common in Indigenous communities. Sharing and borrowing are a way of distributing individual wealth to others in the community, so that obtaining money from others to gamble may not indicate any strain on individual finances. In addition, as with the examples provided above, one also needs to consider the confounding effects of socio-economic status and culture in any statistical or conceptual analysis of Indigenous gambling, and not assume that the problems arising for Indigenous gamblers are necessarily the same as those incurred by non-Indigenous, middle-class Australians (e.g., loss of employment, visiting high interest lenders, cashing stocks and bonds).

d. Marital status and occupational status

As indicated above, one cannot assume that all problem gamblers have a significant relationship or are employed during the times that they are experiencing problems with gambling. For this reason, it is very important to ensure that items do not exclude certain respondents because their demographic profile does not make them eligible to provide an answer.

7.4.5 Comparability

A final consideration in the choice of measure is the role of precedent; namely, how much information or data is presently available concerning the validity and reliability of a particular form of assessment. If a measure has been used extensively, much more information will be available concerning its strengths and weaknesses. One will therefore have some sense as to the general direction of any biases that might be associated with the assessment. Data collected using existing measures will also provide a baseline or reference point against which to make future comparisons. Such considerations are likely to be particularly important in prevalence surveys where there is often an interest in tracking the progression of problem

gambling in the community over time, and where one wants to assess the effects of changes in the availability of gambling, or the effects of specific responsible gambling initiatives.

7.5 Review of existing methods of assessment

As pointed out in a recent review by Govoni, Frisch and Stinchfield (2001), there has been considerable growth in the number of available instruments to assess problem gambling. Depending on how strict one is concerning one's definition of a measurement tool, they estimate that as many as twenty instruments are now available, either via the formal journal literature or in government reports. However, as will be immediately apparent, not all have been subject to the same degree of formal validation and psychometric testing. Some have been used in hundreds of studies, whereas others have not been used other than in the original study that led to their development. For this reason, the following critical review of available assessments will devote most attention to those which have been most widely used and which have been subjected to critical evaluation. Each of the methods or tools will be examined in terms of the criteria and purposes described above to highlight the strengths and weaknesses of each measure, as well as possible ways in which each might be improved or supplemented so as to enhance its usefulness to researchers and practitioners in different contexts.

7.5.1 The Diagnostic Statistical Manual (DSM-IV) and its psychometric derivatives

The first formal recognition of pathological gambling as a mental disorder occurred in 1980 when it was first included in the Diagnostic Manual of the American Psychiatric Association (DSM-III) under "Disorders of Impulse Control Not Elsewhere Classified". The DSM-III classification was based, to a large extent, on the work of the well-known American clinician, Dr. Robert Custer, who argued that pathological gambling was a progressive disorder that followed several clear stages: winning, losing and desperation (Custer, 1982). The three principal elements of this disorder included: (a) A gradual inability to resist the urge to gamble, (b) Significant disruption to personal and family life and vocational pursuits, and (c) That the gambler was not suffering from a personality disorder (Govoni, Frisch and Stinchfield, 2001; Griffiths, 1995). The DSM-III contained 7 criteria almost all of which referred to the consequences of gambling (Table 7.3). These items were not specifically asked as questions, but were checked by the clinician as part of a detailed clinical interview that comprised both specific questions and a general conversation about the nature and extent of the person's gambling. Four or more of the 7 criteria had to be satisfied for the person to be classified as a pathological gambler.

Table 7.3
DSM-III classification (1980)

1.	Arrests for crimes committed because of gambling
2.	Defaulting on debts
3.	Disruption to family or spouse relationships
4.	Borrowing money from illegal sources
5.	Inability to account for loss of money or to produce evidence of winning money; if this is claimed
6.	Loss of work due to absenteeism
7.	Necessity for another person to provide money to relieve a desperate situation

The DSM-III remained in use throughout the early and mid-1980s, but was subject to considerable criticism, most notably by Lesieur (1988) who argued that the exclusion of anti-social gamblers was inappropriate, because of the strong link between anti-social personality

disorder and pathological gambling. Criticism was also directed towards many of the items because they did not appear to be sufficiently inclusive. Many of the items were based on the assumption that gamblers were predominantly middle-class males with a wife, job and assets, and this was not always the case. A number were in fact self-employed and single. Another difficulty was that the focus on the serious consequences of gambling did not provide any significant insights into the pattern of behaviour central to the pathology. This raised the possibility of being unable to diagnose anyone who was gambling excessively, but who had not reached the stage of having experienced significant problems or 'consequences' associated with their behaviour. Accordingly, a revised version, the DSM-III-R was developed in 1987.

This new version was modelled extensively on the DSM criteria for alcoholism and was considered advantageous because it focused much more extensively on behaviour. Not surprisingly, the criteria selected were those relating to prevailing theoretical assumptions concerning the nature of alcohol addiction. Central to this definition was the traditional addiction model that described alcohol dependence as a physiological disorder governed by the experiences of cravings, tolerance, and withdrawal. Gambling was seen as a physiologically addictive behaviour that gave rise to feelings of excitement or arousal. A pathological gambler was one who had to gamble more and more to achieve the same excitement (tolerance), who experienced dysphoric states (e.g., depression or anxiety when not gambling (withdrawal), and who experienced restless, irresistible desire to gamble (cravings). The new classification was extended to 9 items; the new addiction model items were added; and the number of items relating to the consequences of the behaviour was substantially reduced (Table 7.4). Chasing losses was also formally included because of its frequent occurrence in clinical samples (Lesieur, 1984, 1988). Once again, a cut-off 'score' of 4 or greater was required for a positive diagnosis. The exclusion criterion (anti-social personality disorder) was replaced with 'manic episode' to avoid including people who engaged in excessive gambling, but where the cause could be attributed to another mental disorder.

Table 7.4
DSM-III-R Classification for problem gambling (1987)

1. Frequent preoccupation with gambling or obtaining money to gamble.
2. Often gambles larger amounts of money over a longer period than intended.
3. Need to increase the size or frequency of bets to achieve the desired excitement.
4. Restlessness or irritability if unable to gamble.
5. Repeatedly loses money gambling and returns another day to win back losses ("chasing").
6. Repeated efforts to cut down or stop gambling.
7. Often gambles when expected to fulfil social, educational or occupational obligations.
8. Has given up some important social, occupational or recreational activity in order to gamble.
9. Continues to gamble despite inability to pay mounting debts or despite other significant social, occupational, or legal problems that the individual knows to be exacerbated by gambling.

The DSM-III-R classification was seen as a significant improvement on the DSM-III, but as is apparent from Table 7.4, many of the criteria were convoluted and contained some expressions (e.g., restlessness, irritability) that might have been subject to varying interpretations. Thus, a second revision was undertaken in the early 1990s to produce the new (and current classification), the DSM-IV (Table 7.5). In addition to some changes in wording, it was thought prudent to recapture some of the elements of the original DSM-III classification because it was felt that these were reliable indicators of problem gambling. Additional statements relating to borrowing money from others were included, as well as one

relating to the concealment of gambling involvement from others. Another addition was an item relating to the use of gambling "as a way of escaping from problems or relieving a dysphoric mood" (Govoni, Frisch and Stinchfield, 2001; Lesieur and Rosenthal, 1991) because clinical observations suggested that this also appeared to be a strong indicator of pathology. In the final version, the criterion number of items for diagnosis was increased from 4 to 5 and, as indicated in Table 7.5, there were now 10 rather than 9 criteria.

Table 7.5
DSM-IV Classification for problem gambling (1994)

1.	As gambling progressed, became more and more preoccupied with reliving past gambling experience, studying a system, planning the next gambling venture, or thinking of ways to get money.
2.	Needed to gamble with more and more money in order to achieve the desired excitement.
3.	Has repeated unsuccessful attempts to cut down or stop gambling
4.	Became restless or irritable when attempting to cut down or stop gambling.
5.	Gambled as a way of escaping from problems or intolerable feeling states.
6.	After losing money gambling, would often return another day in order to get even ('chasing') one's losses.
7.	Lied to family, employer, or therapist to protect and conceal the extent of involvement with gambling.
8.	Committed illegal acts such as forgery, fraud, theft or embezzlement, in order to finance gambling.
9.	Jeopardised or lost a significant relationship, marriage, education, job or career because of gambling.
10.	Needed another individual to provide money to relieve a desperate financial situation produced by gambling (a 'bailout').

An important point to note about this classification system is that the criteria were not directly based on empirical evidence, but were derived from other sources, including discussions conducted between experts in the area (e.g., Lesieur and Rosenthal, 1991). Very little evidence, if any, was advanced to justify the validity of the 5-criteria cut-off score, or the extent to which these criteria were able to differentiate between pathological gamblers and other gamblers.

Other versions of the DSM criteria

There have been several attempts to develop psychometric versions of the DSM-IV criteria so that the DSM-IV can be used in population surveys and by researchers without the need for a formal clinical interview. Several of these versions are described below.

a. DSM-IV (multiple response)

In the United Kingdom, Fisher (2000) developed a 10-item version of the criteria that was administered to a sample of 1105 casino gamblers. Most items were scored using a frequency scale, where 1 = Never, 2 = Once or twice, 3 = Sometimes and 4 = Often. A point was counted for each item for any response apart from 'Never'. This yielded a score range of 0-10. If respondents scored 3-4 and at least one point from criteria 8, 9 or 10 (severe consequences) they were classified as problem gamblers, whereas those with scores of 5 or more were considered "severe problem gamblers". This version of the DSM-IV was found to have acceptable internal consistency (Alpha = 0.79) and was able to discriminate between different groups of gamblers. Weekly gamblers scored significantly higher than infrequent gamblers, and self-identified problem gamblers scored significantly higher than those identifying themselves as only social gamblers. Factor analysis of the scale items revealed a single factor (preoccupation) that accounted for 30% of the variation between scores. No test or retest reliability of validation against other measures or in other populations was

undertaken (Dickerson, McMillen and Hallebone et al., 1997; Govoni, Frisch and Stinchfield, 2001).

b. Diagnostic Interview for Gambling Schedule (DIGS)

Another version of the DSM-IV is administered as part of a structured interview developed by Winters, Specker and Stinchfield (1997) in Minnesota. In the DIGS, the DSM-IV is measured using 20 items, two for each of the 10 DSM-IV criteria. For each pair of items, a person scores a point if their feedback indicates endorsement of at least one item in the pair. Items are scored with a 12-month or life-time time-frame, and people are classified as pathological gamblers if they score 5 or more. Analyses conducted by the authors has shown that this version has very good internal consistency (Alpha = 0.92) and good criterion or external-validation as evidenced by moderate to high correlations with measures of gambling involvement (e.g., frequency and expenditure).

c. Gambling Treatment Outcome Monitoring System (GAMTOMS) Version

Another psychometric version of the DSM-IV criteria was developed in Minnesota to be used in assessing clients entering state-funded treatment facilities (Stinchfield and Winters, 1996). In this version, each criterion is administered as a Yes or No question and participants are classified either as lifetime or current pathological gamblers based upon a 5-point cut-off score. Extensive validation of the GAMTOMS system including the DSM-IV measure has been undertaken (Stinchfield, 1999) using over 1000 clients admitted to treatment. In the original validation study, the internal consistency of the DSM measure was very good (0.89). Concurrent validity was very high, as indicated by a high correlation with other measures of problem gambling, including the South Oaks Gambling Screen (SOGS) (0.83). External or criterion validity was confirmed by moderate correlations with measures of gambling involvement. A more recent validation study involving a 1-week re-administration of the GAMTOMS measures to newly admitted clients showed that the DSM had very good test-retest reliability (0.74), but yielded a somewhat lower coefficient alpha (only 0.61). Further analysis compared the clinical sample with non-clinical cases and showed that the DSM scores were significantly higher in the clinical sample than the non-clinical sample. The DSM cut-off of 5 was very effective in being able to classify clinical and non-clinical cases, with a specificity of 0.95 and sensitivity of 0.96. The false positive rate was 0.01 and false negative rate was 0.14 (i.e., only 14% of clinical cases were rated as non-pathological gamblers, and only 1% of non-clinical cases were considered pathological). An even higher rate of classification was obtained when the SOGS was used as the classification index suggesting that the two assessments were measuring the same underlying construct.

d. National Opinion Research Centre NORC- DSM-IV Screen (NODS)

This version of the DSM-IV was used in the United States National Survey undertaken by the National Opinion Research Centre at the University of Chicago (1998). The DSM-IV criteria were used to derive 17 items each of which was scored using YES/ NO response options. In the NODS, some DSM-IV criteria were scored using 1 question, and others had 2 questions, some of which acted as filters for the scorable item. The NODS was only administered to respondents who reported having incurred losses of $100 or more in a single day of gambling. Each question was first of all administered with a life-time reference frame, and then the past-year version of the questions followed if the respondent had endorsed the life-time version. Scores ranged from 0-10 and scores of 0 = Low risk gambler, 1-2 = At risk gambler, 3-4 = problem gambler and 5 or greater led to a diagnosis of pathological gambling.

The authors also conducted a very small validation study using a sample of 40 clients in an outpatient treatment centre for problem gambling. Thirty-eight out of 40 scored 5 or more on the life-time measure, and 30 reached this threshold on the past-year version. Test-retest reliability based upon re-administration of the measure 2-4 weeks apart revealed very high correlations (around 0.98). Unfortunately, as Govoni, Frisch and Stinchfield (2001) point out in their critical review, many of the items used in the NODS significantly alter the meaning of the DSM-IV criteria by introducing time-frames for certain symptoms (e.g., "past 2 weeks", "three or more times"). They also express concern about the selection of only those gamblers who lost $100 or more per day. Although this selection criterion would appear to have some superficial face validity, there is nothing to indicate why $100 should be considered the criterion level of expenditure to differentiate low and high levels of involvement. One does not know how many pathological gamblers might have been identified in those who had not lost $100 in one day. Similar concerns are expressed by Dickerson (1999) who draws attention to the lack of information available concerning the specificity and sensitivity of the NODS measure. Although the scale appears to have good face validity (i.e., it appears to measure what it is supposed to measure) from having been derived from the DSM-IV criteria, any cut-off score described by the scale is meaningless until the scale is validated using a comparison-group sample featuring both problem and non-problem gamblers.

Evaluation of the DSM-IV criteria

Relatively few studies have been undertaken to examine the validity of DSM-IV-based assessments, very likely because of the availability of other more widely used and validated psychometric measures (e.g., the SOGS described below). Nevertheless, there are a few studies that offer insights into its potential strengths and limitations. For example, in a study undertaken by Stinchfield, Govoni and Frisch (2001) in Windsor, Ontario, the 10-item GAMTOMS version of the DSM was administered along with a battery of gambling-related measures to several hundred clients in treatment. Psychometric analysis showed that the scale had very good internal consistency (Alpha = 0.94) and very good dimensionality, with one principal factor able to account for 65% of the variance. Other analyses confirmed that DSM-IV scores were also found to be significantly higher in the treatment group than in the general population sample, and that the scale was successful in being able to classify people into the two groups. However, this success varied depending upon the cut-off score. If a cut-off score of 5 were used, the degree of sensitivity was relatively mediocre (0.83) with a 17% false-negative rate. On the other hand, if the cut-off score were reduced to 4, specificity increased to over 90%, suggesting that this was the optimal score to use rather than the formally designated score.

The authors also conducted a number of item analyses and showed that several items were better able to differentiate the groups than others. These items were "tried to cut back or control gambling", "spent a lot of time thinking about gambling", "gambles as a way to escape personal problems" and "chasing losses". It was suggested that future studies could use the weights derived from discriminant functions to weight the different items in the scale, so that the more useful items (such as those listed here) would be afforded greater importance in the calculation of total scores. Although the authors draw attention to some limitations in their evaluation (e.g., sample size, the possibility of problem gamblers in the population sample), the far more serious problem with this evaluation is that the comparison sample is too dissimilar from the problem gambling group. The study does not show how problem gamblers differ from gamblers (as should be the case), but how problem gamblers differ from the general population. One could just as easily interpret the findings as reflecting the difference between regular and infrequent gamblers as opposed to people with and without

the disorder. Indeed, this is to some degree reflected in the items identified as best differentiating the groups. Apart from "chasing losses" and "tried to cut back or control gambling", the other behaviours (preoccupation and escaping worry) would appear to be common features of regular gambling (Delfabbro and Winefield, 1996; Productivity Commission, 1999).

Another validation study was undertaken by Strong, Lesieur, Breen, Stinchfield and Lejuez (2004) using data collected from a community prevalence sample in Minnesota in 1995 (Stinchfield and Winters, 1996) as well as data from a large clinical sample. The DSM-IV and SOGS (see below) was administered to both samples in order to compare the performance of both measures. Although total DSM-IV and SOGS were highly correlated, the DSM-IV was found to be a more conservative measure than the SOGS because of the inclusion of a greater proportion of items relating to more severe problems associated with gambling. Thus, the DSM-IV will typically yield a community prevalence rate much lower than other measures such as the SOGS. As a result of its characteristics, Strong, Breen and Lejuez conclude that:

> *"On average, the DSM-IV appears to target a level of gambling pathology that is too severe to capture gambling-related problems typical in community samples and enough homogeneity in item severity to prevent reliable individual differences to be revealed in clinical samples. As it stands, the DSM-IV appears to be well designed to make categorical decisions about diagnostic status. Therefore, if the DSM-IV is to be used continuously in community settings, the development of criteria to map the lower ranges of severity is needed to increase measurement precision." (2004, p.477).*

Strong, Breen and Lejuez (2004) also found some evidence to support Stinchfield, Govoni and Frisch's (2001) view that the cut-off score for the DSM-IV should be reduced to four to achieve a more inclusive and accurate rate of classification. Another important component of their analysis was a discussion of specific criteria and their capacity to differentiate the two groups. Their results showed that it was possible to rank the DSM-IV in approximate order of severity. Gambling problems typically commenced with:

> *"…interpersonal conflict, increasing preoccupation, concealment of involvement, difficulty cutting down, the tendency to chase losses, needing to gamble with large amounts to feel excited, and finally, the need to rely on others or commit illegal acts to support continued gambling." (p. 477).*

These findings were generally very consistent with the model of problem gambling advanced by Custer (1982) and described in some detail in Lesieur's (1984) book *The Chase*, that highlights the gradual progression from winning to losing, and the desperate pursuit of funds in situations characterised by fewer and fewer options.

Similar views were expressed by Orford, Sproston, Erens, White and Mitchell (2003) in a national prevalence study in Britain using a 10-item version of the DSM-IV as well as the SOGS. Over half of those classified as problem gamblers by the SOGS were not identified as pathological gamblers on the DSM-IV. Orford, Sproston and Erens et al. (2003) also confirmed that the range of endorsement of items was quite low. Some items, such as those relating to being criticised for gambling or spending more than intended were more commonly endorsed (2.5%) whereas the item relating to illegal acts was very seldom endorsed (0.2%). Most items on the DSM-IV had good item-total correlations, with the exception of "going back to win back money" that was seen as being a less reliable indicator of problem gambling. Further analysis of the dimensional structure of the DSM-IV revealed that the criteria yielded two factors. The first, accounting for 40% of the variance, related primarily to the behavioural components of gambling including preoccupation, restlessness

and other similar items, whereas factor 2 (12.5% of the variance) attracted higher loadings for items relating to the consequences of problem gambling. Based upon these findings, the authors concluded that the DSM-IV does not appear to measure a unitary phenomenon. In effect, it brings together two different classes of item: one group that refers to the pathology, and another that relates primarily to the consequences of excessive gambling. For this reason, the authors speculate about the possibility of developing a bi-axial classification for problem gambling, similar to that which has been suggested in the alcohol literature with dependence on one axis and problems on the other (Skinner, 1990). In principle, this appears to have some merit, particularly given that one would not necessarily have to be restricted to a pathology or dependence model as proposed in the alcohol literature. One could just as easily place impaired control in the place of dependence behaviours and allow for a variety of explanations for this progressive loss of control (e.g., conditioning, irrational beliefs). The two dimensions could appear as below in Table 7.6.

Table 7.6
A bi-axial model for problem gambling

	Severity of Gambling Consequences	
	Low	*High*
Low impaired control / Behavioural "pathology"	(A) Non-problematic gambling	(B) Gamblers in treatment + regaining control
High impaired control / Behavioural "pathology"	(C) Early stage problem gambling	(D) Late stage problem gambling

As Strong, Breen and Lejuez (2004) point out, the DSM-IV criteria appear to be reasonably effective in being able to distinguish categories (pathological from non-pathological), and so would appear to achieve good differentiation between categories D vs. A. However, a difficulty with the DSM-IV classification is that the combination of two different types of item in the same scoring protocol can lead people to being classified as pathological gamblers for different reasons. Those in Category C may have all the problematic behaviours (preoccupation, going back to win money), but may have only gambled for a short period so that they have not experienced any significant consequences associated with gambling. On the other hand, there are those in category B who may have gambled for a long period and who are heavily in debt and facing gaol, but who have made a concerted and successful attempt to cease gambling by seeking help. Both could be classified as problem gamblers under the system but for quite different reasons. Although this is not entirely unsatisfactory because it means that the DSM-IV can capture a wider sample of problem gamblers, it is conceptually untidy and suggests that the classification could just as easily measure the two dimensions separately and in more depth. This view is supported by Strong, Breen and Lejuez's (2004) conclusion (stated above) that the DSM-IV criteria may not be all that useful in differentiating different degrees of problem gambling, as might be the case in comparisons of Category A with B. The severe consequence items tend to have very low rates of endorsement because these behaviours occur only in the more severe cases of problem gambling, and so will have almost no variability within a non-problematic sample. At the same time, those items referring to behaviour may be problematic for the opposite reason: they are overly inclusive and describe behaviours (e.g., gambling more than intended) that are observed in many non-problem regular gamblers. Thus, the value of the DSM-IV may be very limited outside clinical settings; and, in a sense, this may not be surprising, given that it was specifically designed to be used in this context and not in community prevalence surveys.

A final concern with the DSM-IV relates to its general construct validity. Apart from the potentially bi-axial structure just described, there is also the question of theoretical validity underlying the classification. The criteria are unashamedly borrowed from the alcohol classification and this immediately begs the question as to the applicability of a traditional dependence model to gambling. As will be clear from the discussion of definitions, there is little doubt that a certain proportion of gamblers may fit this profile (as indicated by Blaszczynski and Nower's pathway model). However, there is also considerable research evidence in Australia and New Zealand that argues against an exclusive adoption of this model (Abbott, 2000; Griffiths and Delfabbro, 2002; Walker, 1989). First, many problem gamblers do not appear to experience withdrawal symptoms associated with gambling. Depression and anxiety is likely to be much as much a function of the experience of losing rather than an absence of the activity. Second, there is little evidence that arousal plays any systematic role in gambling, particular on poker machines. Gamblers are highly unlikely, under any circumstances, to experience the kind of physiological "high" associated with opiate consumption, and there is little research evidence that physiological arousal systematically varies with the process of winning and losing (as would be predicted) (Walker, 1989). Third, problem gamblers do not appear to be pathological risk-takers, as would be indicated by higher scores on measures of sensation-seeking (Allcock and Grace, 1988; Blaszczynski, Wilson, and McConaghy, 1986). Fourth, a substantial proportion of problem gamblers do not experience cross-addictions as would be expected if all problem gamblers had an inborn disposition to develop addictions. Taken together, these findings suggest that the pathology or dependence model advocated by the DSM-IV is unlikely to be consistent with the characteristics of a substantial proportion of problem gamblers in Australia. For this reason, it is unlikely to be a useful tool in describing the various degrees and types of problem gambling in this country.

Conclusions: DSM-IV

A summary assessment of the DSM-IV criteria is provided in Table 7.7. As indicated, this assessment tool is generally best used in clinical settings to cross-validate the findings obtained using other screens, and to diagnose people who are likely to have very significant gambling problems. The DSM-IV appears to be a less useful tool to use in prevalence studies because it tends to produce somewhat lower estimates of prevalence than other measures (e.g., SOGS). It may also provide less useful information concerning the varying degrees of harm present in the population. In terms of its practical use, it is suggested that best results are likely to be obtained when the criteria are administered by a trained clinical psychologist with experience in the diagnosis of gambling-related problems. However, if this is not feasible, then the 10-item version employed by Stinchfield, Govoni and Frisch (2001) would appear to be the best validated alternative.

At the present time, we argue that the current content of the DSM-IV is potentially problematic in that it is heavily biased towards the North American or pathology model of problem gambling. As a result, not all subgroups of problem gamblers will necessarily receive a positive diagnosis using the DSM-IV alone. Accordingly, it is recommended that the DSM-IV be administered in conjunction with other measures, as has been the process in several national prevalence studies (Abbott and Volberg, 1996; Orford, Sproston and Erens et al., 2001). This recommendation also applies to clinical settings in which there may be a need to assess the effects of interventions over time. The current content of the DSM-IV needs to be supplemented by other more specific indicators of behavioural change which are framed in terms of frequencies rather than the all-or-nothing response format that applies in the initial process of diagnosis.

Table 7.7
Summary assessment of the DSM-IV and derived measures

Dimension	Comments
Reliability	• Generally very good. Acceptable Alpha and test-rest reliability
Construct validity	• Appears to be bi-dimensional: Dimension 1: Pathological behaviours: Dimension 2: Consequences of gambling • Strong emphasis on pathology / addiction model of pathological gambling
Classification accuracy	• Generally very good, but imposes stricter criteria than most other measures. Has lower sensitivity and higher specificity. Tends to give rise to more false negatives
Appropriate validation sampling	• Not been sufficiently tested in comparisons of regular problem and non-problem gamblers
Dimensionality	• Coherent, but appears to have 2 dimensions
External / Criterion validation	• Good. Correlates with other measures of gambling-related harm
Concurrent validity	• Highly correlated with other measures of problem gambling, including the SOGS
Item variability	• Problematic. The base-rate of consequence items is too low, whereas the rates for some behavioural items may be too high.
Practicality	• Best version is the 10-item scale developed in Canada (Stinchfield, Govoni and Frisch, 2001). NODS version not recommended until further validation is undertaken
Applicability	• Not very useful in prevalence surveys • Best used to validate the results of other screening measures • Useful in clinical diagnosis, but may not allow sufficient variability to assess therapeutic change • Consequence items may be biased towards higher SES groups or male gamblers
Comparability	• Some comparative prevalence data available, but less widely used than the SOGS and in more varying forms (see below)

7.5.2 South Oaks Gambling Screen

The South Oaks Gambling Screen (or SOGS) was based on DSM-III-R criteria and developed as a screening tool for patients admitted to a New York psychiatric hospital (Lesieur and Blume, 1987) to test for symptoms of pathological gambling. Items for the new measure were developed by administering a very large number of items to 867 patients and then conducting clinical and "significant other" interviews. Individuals were then classified as pathological and non-pathological gamblers. Any items that appeared too similar or which produced very high or low levels of responding were omitted leaving a final list of 20 questions. Using this list, it was found that a score of 5 best discriminated between those who did and those who did not have a problem (this was presumably based on the score that minimized the number of classification errors). The shortened list was then administered to a number of validation samples. In the first phase of validation, 297 inpatients were administered the SOGS and subjected to independent assessment by a counsellor. The SOGS identified 13% of people as pathological gamblers compared with a figure of 12% for the independent counsellor assessments. In the second phase, 213 Gamblers Anonymous (G.A.) members, 384 students and 152 hospital employees were administered the SOGS and the DSM-III-R criteria in a pencil and paper format. Ninety-eight percent of GA members were classified as problem gamblers compared with only 5% of students and 1.3% of hospital

employees. SOGS scores were very highly correlated with the DSM-III-R classifications (0.97), and yielded very impressive error rates (only 1.2% false positives and 1.9% false negatives). The SOGS also fared very well in further reliability analysis involving repeated 1-month administrations to 112 patients. The test-retest reliability was very good (0.71) and the internal consistency was very high (Alpha = 0.97).

A full list of the SOGS items is provided in Table 7.8. As discussed in some detail in previous reviews (Ben-Tovim, Esterman, Tolcahrd and Battersby, 2001; Thomas, Jackson and Blaszczynski, 2003), the SOGS is made up of a variety of different types of item. Approximately a third of items relate to the consequences of gambling (e.g., loss of productivity), 9 items (45%) relate to borrowing money (e.g., from partner, friends), and only 5 relate to behaviours or attitudes towards one's own gambling (feeling guilty, feeling like one had a problem and feeling like one could not stop gambling). In comparison with the DSM-IV, the SOGS places much less emphasis upon gambling-related behaviour and increases the relative proportion of questions relating to the consequences and the symptoms of pathological gambling (e.g., the need to borrow money). The original version of the SOGS was given a life-time frame of reference so that people were asked whether each statement was EVER true of them, but most commonly the scale has been administered with a 6-month or 12-month frame of reference (SOGS-R) to provide an estimate of current problems (see Productivity Commission, 1999 for a review).

The SOGS has a number of positive features. It is quite short, taking only 5-10 minutes to administer and provides a readily interpretable cut-off score that allows comparisons of pathological gambling rates across different samples. The inclusion of a variety of items also means that the SOGS is able to capture a broader range of problems than the DSM-IV. In addition to the classification function afforded by using the cut-off score, the SOGS also provides a continuous scale score that can be used to assess therapeutic change and which can be used in research studies. Almost every study that has used the SOGS has found it to have acceptable internal consistency and that it correlates with other measures of problem gambling (McMillen, Marshall, Wenzel and Ahmed, 2004) and gambling-related harm (Allcock, 1995; Delfabbro and Winefield, 1996; Dickerson, 1995; Dickerson, McMillen and Hallebone et al., 1997; Productivity Commission, 1999; Walker and Dickerson, 1996; Stinchfield, 2002).

Despite its widespread adoption as the measure of choice in most American and Australian prevalence surveys, the SOGS has also attracted considerable criticism. One of the most important of these is that it tends to give rise to an unacceptably high rate of false positives when used in non-clinical samples (Shaffer, Hall and Vanderbilt, 1997). This conclusion is based on several studies of regular gamblers (e.g., Dickerson, Walker, Legg England, and Hinchy, 1990; Ohtsuka, Bruton, Borg, DeLuca and Imms, 1995), where the SOGS has yielded problem gambling rates of over 30%, and the findings from community prevalence surveys that consistently find higher levels of problem gambling using the SOGS than the DSM-IV. For example, when Abbott and Volberg (1996) administered the lifetime version of the SOGS to New Zealand gamblers and also assessed them with the DSM-IV, 24% of those classified as probable problem gamblers with the SOGS were not diagnosed by the DSM.

Table 7.8

The South Oaks Gambling Screen (SOGS)

1. When you gamble, how often do you go back another day to win back money you lost? [*a*. Never; *b*. Some of the time (less than half the time) I lost; *c*. Most of the time I lost; *d*. Every time I lost]
2. Have you ever claimed to be winning money gambling but weren't really? In fact you lost? [*a*. Never or never gamble; *b*. Yes, less than half the time I lost; *c*. Yes, most of the time].
3. Do you feel you have ever had a problem with gambling? [*a*. No; *b*. Yes, in the past, but not now; *c*. Yes].
4. Did you ever gamble more than you intended to? [Yes, No].
5. Have people criticised your gambling? [Yes, No]
6. Have you ever felt guilty about the way you gamble or what happens when you gamble? [Yes, No].
7. Have you ever felt like you would like to stop gambling, but didn't think you could? [Yes, No].
8. Have you ever hidden betting slips, lottery tickets, gambling money, or other signs of gambling from your spouse, children or other important people in your life? [Yes, No].

9a. Have you ever argued with people you live with over how you handle money? [Yes, No: *not scored*]

9b. If you answered yes to the previous question: Have money arguments ever centred on your gambling? [Yes, No].

10. Have you ever borrowed from someone and not paid them back as a result of your gambling? [Yes, No].
11. Have you ever lost time from work (or school) due to gambling? [Yes, No]
12. If you borrowed money to gamble or pay gambling debts, who or where did you borrow from? [check 'Yes' or 'No' for each the items that follow).
13. From household money? [Yes, No]
14. From your spouse? [Yes, No].
15. From other relatives or in-laws? {Yes, No].
16. From banks, loan companies, or credit unions? [Yes, No].
17. From credit cards [Yes, No].
18. From loan sharks? [Yes, no].
19. You cashed in stocks, bonds or other securities? [Yes, No].
20. You sold personal or family property? [Yes, No].
21. You borrowed on your checking account (passed bad checks)? [Yes, No].

Scoring (Yes/ No format)*: Q1 (Score 1 if most of the time or every time I lost); Q2 (Score 1 if less than half the time I lost or yes, most of the time); Q3,(Score 1 if yes, in the past, but not now or yes. Ignore question 9a. For all remaining questions, a score of yes counts as 1 point. A score of 5 indicates a 'probable pathological gambler', and a 'problem gambler' in Australia (Lesieur and Blume, 1987).*

Time-frame*: Original (Life-time, 'have you ever…?'; SOGS-R (In the last 6 months?), SOGS-M (In the last 12 months?, Productivity Commission, 1999).*

Multiple-response category: 1 =Never, 2= Rarely, 3 = Sometimes, 4=Often, 5= Always for items with Yes/ No response categories. Rarely or more often yields 1 point.

Similar findings were reported by Stinchfield (2002) in Minnesota using a community sample of 803 people and over 400 gamblers in treatment. In the treatment sample, a comparison analysis involving the DSM-IV, showed the SOGS was able to match people to the DSM classification with very low rates of false negatives (0.14) and positives (0.003), but the false positive rate increased to 50% in the general community sample. These results were very similar to findings reported by Dickerson, McMillen and Hallebone et al. in a 1995 study of problem gambling in New South Wales, in which it was found that a high proportion of people who scored in the problematic range on the SOGS did not believe that they had a problem.

A somewhat questionable aspect of these commonly made critiques is that many of the same criticisms (e.g., Dickerson's) could also be applied to studies undertaken using the DSM-IV or any other measure. In addition, there are other elements of both Abbott and Volberg (1996) and Stinchfield's (2002) studies that need to be pointed out in order to place their comments in context. First, in Abbott and Volberg's study, the problematic false positive rate only occurred when the lifetime version of the SOGS was used. When the current version or SOGS-R was used, the SOGS was found to be overly conservative compared with the DSM-

IV classifications, and concerns were instead expressed about the unacceptable level of false negatives. On the other hand, Stinchfield's critique is problematic because the conclusions were based on a sample with a very low base-rate. Only 4 problem gamblers were identified in the community sample, so that the oft-cited false positive rate of 50% was based upon the misclassification of 2 out of 4 cases.

Another criticism of the SOGS concerns its construct validity. Although the items are, in general, consistent with Custer's (1982) progressive model of gambling pathology, and Lesieur's (1984) concept of "chasing" losses, the screen as a whole is largely atheoretical. Important elements of problem gambling behaviour such as impaired control over behaviour are omitted and there seems to be little resemblance between the SOGS and the dependence-based model utilised in the DSM-III-R against which the SOGS was validated (Battersby, Thomas, Tolchard and Esterman, 2002). In their view, many of the items in the SOGS appear to be "based on opinion, rather than theory and empirical data" (p. 263).

Other more specific criticisms have concerned the content of the SOGS, in particular, the very high proportion of questions relating to financial sources and borrowing. Apart from the fact that some items may not be relevant for many gamblers (e.g., borrowing from spouses), some critics (e.g., Ben-Tovim, Esterman, Tolchard and Battersby, 2001) also argue that these items limit the explanatory value of the SOGS and its potential utility as an index of therapeutic change. In their view, it would be preferable if other, potentially more varied items, were included so that the measure could provide more detailed information concerning the nature of the individual's problem. With so few items relating to behaviour, Ben-Tovim, Esterman, Tolchard and Battersby (2001) question whether one would be able to use the SOGS to determine the effectiveness of interventions. For example, if a gambler entered gambling and ceased borrowing, he or she could lose anything up to 10 points on the SOGS without any change in other behaviours related to problem gambling. Ben-Tovim, Esterman, Tolcahrd and Battersby therefore recommend the development of measures that would allow greater variability within the clinical range, so that they would be more useful for clinical practitioners.

Other commentators have directed more specific criticisms at individual items in the SOGS, arguing that several items do not appear to discriminate between regular gamblers and problem gamblers. Tomas, Jackson and Blaszczynski (2003), for example, argue that the SOGS is very unbalanced. Some items appear to be too "soft", whereas many of the borrowing items are too "hard" in that they will usually only be endorsed by the most desperate problem gamblers.[5] This situation very likely contributes to the SOGS tendency to overclassify regular non-problem gamblers who happen to endorse five of the softer items, and nothing else. Particular items that have been subject to criticism include: "gambling more than intended", "criticized for gambling", "claimed to be winning", and "going back to win back money", with several studies (Orford, Sproston, Erens, White and Mitchell, 2001; Stinchfield, 2002) finding that the percentage rates of endorsement for these items to be many times higher than the overall prevalence rate. Strong, Breen and Lejuez (2004) express similar views and confirm that these SOGS items do not appear to be stable and reliable across different population comparisons. As the authors note: "these unstable items showed a consistent pattern in that they all reflected less severe gambling problems in the community than in clinical samples" (p. 476). They further note that:

[5] Principal components analysis undertaken by Orford et al. (2001) found that the SOGS did not appear to describe a unitary concept. Only 26% of variance was explained by the 1st extracted factor. A similar finding was obtained by Stinchfield (2002). Even worse results were obtained by McMillen et al. (2004) in Victoria. In their analysis, the SOGS appeared to be composed of anything up to 6 factors.

> *"Examination of the unstable SOGS items revealed contents that reflect internal interpretations and self-referent perceptions that reasonably could vary according to individual differences other than overall problem severity: Feeling guilty about gambling, the self-perception that gambling is a problem, the self-perceived loss of control all could be influenced by individual differences in thresholds or comparison groups used to decide how to respond." (p. 476)*

In other words, items identified as "attitudinal" in Thomas, Jackson and Blaszczynski's review, are seen as fallible because they are too subjective and are easily interpreted in a way that was not intended by the author. Strong, Breen and Lejuez (2004) suggested that future measures should focus more upon objective behavioural indicators of problem gambling because these are less likely to be subject to variations in interpretation. Indeed, this suggestion is given further weight by the findings of Ladouceur, Bouchard, Rheaume, Jacques, Ferland, LeBlond and Walker (2000) who administered the SOGS twice to the same participants after providing explanatory material concerning each item after the first administration. Scores were found to be significantly lower on the second occasion. Similar concerns were raised by Thompson, Milton and Walker (1999), although they did not endorse the view that misinterpretation of SOGS items necessarily leads to a higher rate of false positive classifications. All of these criticisms have led Strong, Breen and Lejuez (2004) (a research team that also included Henry Lesieur) to suggest reducing the number of SOGS items from 20 to 15 to exclude the unstable items, and possibly introduce additional items with a stronger behavioural focus.

Conclusions: SOGS

The SOGS remains a convenient and useful screening tool that can be used either in clinical settings (prior to the administration of other measures) or in research studies involving gamblers recruited from the community. Psychometrically, it has good reliability, and appears to correlate reasonably well with other established measures as well as with various indicators of gambling-related harm. However, from the outset, the SOGS was never designed to be used in prevalence studies, in which context it may produce an excessive number of false positive classifications. The principal source of this problem appears to be the lack of a clear theoretical framework governing the selection of items for the measure. Rather than being based on an established theory of pathological gambling, the SOGS is a collection of different types of items, some of which relate to everyday behaviours associated with regular gambling, and others that are clear indicators of severe gambling problems. Although this allows the SOGS to describe varying degrees of pathology, it also means that less severe (and potentially non-problem cases) will be classified along with severe cases. The challenge for future developmental research involving the measure is to achieve greater balance and coherence by (a) reducing the number of items relating to borrowing, (b) removing several attitudinal items, and (c) revalidating the measure using a comparison sample of regular non-problem gamblers (as diagnosed by a formal clinical interview).

Table 7.9
Summary assessment of the SOGS

Dimension	Comments
Reliability	• Generally very good. Acceptable Alpha and test-retest reliability
Construct validity	• Appears to be multi-dimensional: • Dimension 1: Pathological behaviours: Dimension 2: Consequences of gambling • Does not appear to have a strong theoretical foundation
Classification accuracy	• Tends to give rise to more false positives when used in community samples
Appropriate validation sampling	• Not been sufficiently tested in comparisons of regular problem and non-problem gamblers
Dimensionality	• Coherent, but appears to have multiple dimensions
External / Criterion validation	• Good. Correlates with other measures of gambling-related harm
Concurrent validity	• Highly correlated with other measures of problem gambling, including the DSM-IV, and CPGI (see below)
Item variability	• Very Problematic. The base-rate of consequence items is either too low or too high.
Practicality	• Very easy to use. Can be used in research studies and as a screening tool in clinical settings
Applicability	• Questionable validity in prevalence surveys • Best used as a screen in conjunction with other diagnostic measures • May not allow sufficient variability to assess therapeutic change • Items appear to be biased towards higher SES groups or male gamblers
Comparability	• Very widely used in multiple jurisdictions (see below)

7.5.3 The Victorian Gambling Screen

As a result of concerns about the appropriateness of using a North American gambling screen in an Australian context, the Victorian Casino and Gaming Authority (VCGA) in 1997 commissioned researchers from the Flinders Medical Centre (Ben-Tovim, Esterman, Tolchard, and Battersby, 2001) to develop a new measure (the Victorian Gambling Screen, or VGS). See Table 7.10. The initial stage of the project was very similar to that used in the development of the SOGS. A large pool of items was developed from other existing instruments and from structured interviews with problem gamblers. This set of items was then administered to 138 gamblers selected from multiple locations, including outside venues (n = 40), in treatment settings (n = 16), door-to-door (n = 40) and over the telephone (n = 42). Content analysis of these items removed any item with very high or low rates of endorsement and the final set of items was subjected to factor analysis. Ben-Tovim, Esterman, Tolchard and Battersby extracted 3 clearly defined clusters.

- Factor 1 (15 items): Gambling-related harm (63% of variance)
- Factor 2 (3 items): Gambling enjoyment (10% of variance)
- Factor 3 (3 items): Harm to partner (8% of variance)

Table 7.10
The Victorian Gambling Screen (from Delfabbro and LeCouteur, 2003)

1. Have you felt that after losing you must return as soon as possible to win back any losses?
2. How often have you lied to others to conceal the extent of your involvement in gambling?
3. How often have you spent more on gambling than you could afford?
4. Have you and your partner criticized each other (about gambling)? (HP)
5. Have you felt guilty about your gambling?
6. Have you thought you shouldn't gamble or gamble less?
7. Have you hidden betting slips, and other signs of gambling from your spouse, partner or children or other important people in your life?
8. How often has anyone close to you complained about your gambling?
9. How often have you had to borrow money to gamble with?
10. Has gambling been a good hobby for you? (GE)
11. Nowadays, when you gamble, is it fun? (GE)
12. Have you gambled with skill? (GE)
13. Nowadays, when you gamble, do you feel you are on a slippery slope and can't get up again?
14. Has your need to gamble been too strong to control?
15. Has gambling been more important than anything else you might do?
16. Have you and your spouse put off doing things together because of gambling? (HP)
17. Has the thought of gambling been constantly on your mind?
18. Have you lied to yourself about gambling?
19. Have you gambled in order to escape from worry or trouble?
20. How often has your gambling made it harder to make money last from one payday to the next?
21. Has your partner had difficulties trusting you (about gambling)? (HP)

Item scoring: 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Always

Subscales: HP = Harm to partner (range 0 –12), GE = Gambling enjoyment (range 0 – 12), All other items Harm to Self (range 0 –60). Only the Harm to Self scale reliably differentiates between problem gamblers and non-problem gamblers.

Cut-off Score: 21 or higher out of 60 on the Harm to Self item indicates a gambling problem.

The factor structure of the scale was validated by administering the reduced set of items to a second sample of 261 respondents, once again drawn from a variety of sources. This analysis again confirmed the 3-factor structure. Then, to determine the classification accuracy of the scale and an appropriate cut-off score, 71 people were sampled from the original 261, administered the SOGS, the DSM-IV and then subjected to an extensive clinical interview that was taped and analysed by a panel of experienced clinical practitioners. These "gold standard" clinical assessments were used in conjunction with the DSM-IV criteria to differentiate pathological and problem gamblers from non-problem gamblers. The optimum cut-off score was determined using ROC analysis (Receive Operator Characteristics), which determines the degree of sensitivity and specificity of the VGS using different cut-off scores. The best cut-off score is the one that classifies people into problem vs. non-problem groups with the minimum number of false positives and negatives (i.e., where there is an optimal trade off between sensitivity and specificity). By applying this method, the researchers settled upon a cut-off score of 21 out of 60 for the harm to self scale as the score to differentiate problem gamblers and the rest of the sample, whereas a score of 9 differentiated borderline and problem gamblers from the rest of the sample. Using a cut-off score of 21, it was found that 93% of cases were correctly classified as problem gamblers, which represented a very high degree of accuracy.

Further analysis of the concurrent validity of the VGS showed that it was highly correlated with the SOGS (0.87) indicating considerable conceptual overlap between the two scales. There were, however, differences in the distribution of scores. When both scales were converted to the same scoring range by multiplying SOGS scores by 60, the VGS appeared to have a more even distribution of scores. As Delfabbro and LeCouteur (2003) pointed out:

> "*The analysis showed that SOGS scores and VGS scores are reasonably similar when SOGS scores of 0-10 are considered, but that one begins to observe discrepancies when scores are greater than 10. People who score very high VGS scores (e.g., 50 or higher) do not tend to score all that much higher than 10 on the SOGS. In other words, SOGS tends to be subject to more of a ceiling effect. That is, variations in gambling severity in the problem gambling range are not detected by SOGS, whereas they are by the VGS. This means that the VGS can better distinguish between an extreme but genuine case of problem gambling and those who have a serious problem*."

These findings suggested that, while the SOGS was effective in being able to distinguish between problem gamblers and non-problem gamblers, it provides less information about the nature and extent of the problem. This difference was very likely because of the greater variability of items in the VGS. As Thomas, Jackson and Blaszczynski (2003) show, the VGS contains no items relating to borrowing and has significantly more items relating to people's subjective appraisals of their gambling (e.g., whether they can control their urges, are preoccupied with gambling, or feel that they are losing control over their behaviour).

Evaluation of the VGS

Overall, the development of the VGS appears to have been undertaken appropriately, even though some concerns might be raised about the limited size of the final validation sample, and the extent to which it is representative of other gamblers either in treatment or in the community. The more general criticism is that the VGS does not entirely overcome one of the principal limitations of the SOGS; namely, the lack of a clearly articulated theoretical foundation (Thomas, Jackson and Blaszczynski, 2003; McMillen, Marshall, Wenzel and Ahmed, 2004). The principal assessment scale is entitled "Harm to self", but the vast majority of items do not relate to harm at all, but to attitudes and behaviours. As with the SOGS, it would appear that the VGS captures some of the critical elements of impaired control consistent with the DSM-IV classification of pathological gambling as a disorder of impulse control, but other items (e.g., concealment, interpersonal conflict) are not consistent with this conceptualisation. Furthermore, as McMillen, Marshall, Wenzel and Ahmed point out, there is always a danger that the selection of the original items in the validation sample may have been strongly influenced by the theoretical views of the designers. Since most previous work in the area has involved the SOGS, it is not surprising to find considerable overlap between the SOGS and VGS items, and that the two measures are very highly correlated. In their review, Delfabbro and LeCouteur raised the concern that the VGS would be unlikely to influence current assessments of prevalence based upon the SOGS, because the scores only strongly diverge when SOGS scores are at least 10. Accordingly, they draw attention to the need to validate the VGS using a community sample.

This important task has recently been undertaken in the study by McMillen, Marshall, Wenzel and Ahmed (2004) in Victoria in a survey of 8,479 adults. In this survey, 3 instruments, the VGS, the SOGS and the CPGI (described below) were administered to separate samples of regular gamblers. Although this methodology is not ideal in that the three samples could have differed in terms of their demographic characteristics or other gambling variables, this methodology was chosen to reduce the burden on participants and to maintain adequate survey completion rates. The results confirmed that the VGS has good internal consistency, a 3 factor structure, and that the distributional structure of the VGS corresponded quite well to the critical cut-off points specified by Ben-Tovim, Esterman, Tolchard and Battersby (2001) in the original validation report. However, based upon the recommended cut-off score of 21, the VGS produced a very conservative estimate of prevalence when compared with the other two measures (0.74 vs. 0.97 for CPGI and 1.12 for the SOGS). The authors therefore

recommended that the cut-off score be revised downwards to 15, which yielded a much more similar (although now slightly higher) estimate than the other two (1.22). Another important finding to emerge from the study was that the VGS was moderately to highly correlated with other independent measures of psychological maladjustment (e.g., greater anxiety and depression), all of which have been found to be prevalent in clinical samples of problem gamblers (see Delfabbro and LeCouteur, 2003 for a review).

Conclusions: VGS

The VGS is the only prevalence measure that has been developed in Australia, and the first community validation study shows that it tends to outperform the SOGS in a number of ways. In addition to providing a wider distribution of scores within clinical samples, the VGS also appears effective in differentiating between problem and non-problem gamblers in the community. It has good reliability and dimensionality and good concurrent and criterion validity. The only weakness of the VGS identified in the validation study is its cut-off score, which may need to be revised before it can be used in further prevalence studies. Further item analysis is also needed to determine whether some of the subjective items in the VGS (e.g., feeling guilty, criticised) are also subject to the same problems as they are when administered as part of the SOGS. If this proves to be so, then the VGS may not have been successful in allaying many of the concerns raised by Strong, Breen and Lejuez (2004) in their evaluation of the SOGS, and may suggest the need for the introduction of a greater number of more objective behavioural items.

Table 7.11
Summary assessment of the VGS

Dimension	Comments
Reliability	• Generally very good. Acceptable Alpha and test-retest reliability
Construct validity	• Does not appear to have a strong theoretical foundation • Items are mostly subjective • Does not appear to provide a strong measure of harm
Classification accuracy	• A cut-off score of 21 appears to give rise to false negatives, whereas 15 yields prevalence rates at least as high as SOGS in community samples
Appropriate validation sampling	• Not been sufficiently tested in comparisons of regular problem and non-problem gamblers
Dimensionality	• Good
External / Criterion validation	• Very good. Correlates with other measures of gambling-related harm
Concurrent validity	• Highly correlated with other measures of problem gambling, including the DSM-IV, and CPGI (see below)
Item variability	• May be problematic. Items taken from the SOGS may not discriminate between regular non-problem and problem gamblers
Practicality	• Very easy to use. Can be used in research studies and as a screening tool in clinical settings
Applicability	• Acceptable validity in prevalence surveys • Offers greater variability to assess therapeutic change • Items appear to be less biased towards higher SES groups or male gamblers
Comparability	• Very little use outside Flinders University (see below)

7.5.4 The Canadian Problem Gambling Index (CPGI)

The Canadian Problem Gambling Index was developed by Ferris and Wynne (2001) because of dissatisfaction in Canada with previous measures. Both the DSM-IV and the SOGS had been developed primarily for use in clinical settings, and so there was a need to develop a valid instrument for use in community prevalence surveys. A further aim was to generate a measure that would be useful from a public health standpoint. Such a measure would be able to provide a prevalence rate, and also demonstrate the varying severity of gambling-related problems, as well as take greater account of the social and economic consequences of gambling.

The first stage of the development of the CPGI involved a process similar to the VGS, with the selection of a very large set of possible items derived from literature searches, consultations with leading experts in the field, and interviews with problem gamblers. A sample of 143 people comprising people from the general population, regular gamblers and problem gamblers in treatment were administered the larger set of items and then only those items that effectively differentiated between the groups were retained. The final problem gambling scale comprised 9 items each scored on a 4 point scale in reference to the previous 12 months where 0 = Never, 1 = Sometimes, 2 = Most of the time, 3 = Almost always. (Table 7.12). As indicated in Table 7.12, one has to score 8 or more on the scale to be classified a problem gambler, with those scoring from 1 to 7 being classified as being at low or moderate risk.

The second stage of the evaluation involved administering the scale to 3120 Canadians in a telephone survey to confirm the factor structure and psychometric properties of the measure. A subgroup of 417 people were re-administered the scale after this initial survey in order to determine its test-retest reliability. All of this initial analysis proved highly successful. The CPGI had very good internal consistency (0.84), and a 4-week test-retest correlation of 0.78. Concurrent and criterion validity was confirmed by high correlations with the existing measures (0.83 with the SOGS and 0.83 with the DSM-IV), and significant positive correlations with measures of gambling involvement. CPGI classifications were also very similar to the DSM-IV with sensitivity = 0.83 and specificity = 1.00. The CPGI was found to provide a slightly more conservative estimate of prevalence than the SOGS, but higher than the DSM-IV (0.90% vs. 1.3% for the SOGS and 0.70% for the DSM-IV). Govoni, Frisch and Stinchfield (2001) argue that the close correspondence between the results obtained for the CPGI as compared with other measures needs to be treated with some caution because 5 out of 9 items in the CPGI are almost identical to ones in the SOGS, and another 2 are very similar to items in the DSM-IV.

Since this initial study, the CPGI has been used in multiple prevalence studies in Canada (Focal Research, 2002 in New Brunswick; Shrans and Shellick, 2003 in Nova Scotia; Volberg and Ipsos-Reid, 2003 in British Columbia; Patton, Brown, Dhaliwal, Pankratz and Broszeit, 2001 in Manitoba; Doiron and Nicki, 2001 in Price Edward Island; Wiebe, Single and Falknowski, 2001 in Ontario; Wynne, 2002 in Saskatchewan). Prevalence rates using this scale have ranged from a low of 0.4% in British Columbia to 1.2% in Saskatchewan, with a national average of around 1.0%. Once again, in studies where both the SOGS and CPGI have been administered, the CPGI generally yields lower prevalence rates when used with an 8-point cut-off score. In British Columbia, for example, the prevalence for SOGS 5+ was 1.1% vs. 0.40% for the CPGI.

Table 7.12
The Canadian Problem Gambling Index (Ferris and Wynne, 2001)

In the last 12 months how often have you [or have for item 7]?

1. Bet more than you could really afford to lose?
2. Needed to gamble with larger amounts of money to get the same feeling of excitement?
3. Gone back another day to try and win back the money you lost?
4. Borrowed money or sold anything to get money to gamble?
5. Felt that you might have a problem with gambling?
6. Felt that gambling has caused you health problems, including stress and anxiety?
7. People criticized your betting or told you that you have a gambling problem, whether or not you thought it was true?
8. Felt your gambling has caused financial problems for you or your household?
9. Felt guilty about the way you gamble or what happens when you gamble?

Scoring: 0 = Never, 1 = Sometimes, 2 = Most of the time, 3 = Almost always. Cut off scores: 1-2 = low risk, 3-7 = Moderate risk, 8-27 = Problem gambler.

Evaluation of the CPGI

The CPGI has been used twice in Australia. In the first study, conducted by the Queensland Government, 13,082 adults were administered the CPGI in 2001 as part of a household survey. Consistent with Canadian results reported above, the problem gambling prevalence rate based upon a CPGI score of 8-27 was 0.83%, and this was considerably lower than the figure of 1.88% (SOGS 5+) obtained by the Productivity Commission (1999), suggesting once again that it is a more conservative measure of problem gambling. Similar prevalence results were obtained by McMillen, Marshall, Wenzel and Ahmed (2004) in a comparative study of the SOGS, VGS and CPGI (as described above).

McMillen, Marshall, Wenzel and Ahmed's study also revealed that the CPGI has many positive features which make it superior to both the SOGS and VGS. It achieves a very high level of internal consistency (Alpha > 0.90) with fewer than half the number of items. It also displayed very good dimensional qualities with a single factor explaining 64% of the variance between items, and had very good item variability, unlike the SOGS which was found to have a number of very seldom endorsed items. The CPGI also had the strongest correlations with common correlates of problem gambling, including anxiety, depression and suicide ideation. The only possible weakness of the CPGI to emerge from this study was that its distribution of scores did not appear to map onto its cut-off score. The distribution was very positively skewed without any obvious peaks or troughs as had been the case for the VGS. Despite this, McMillen, Marshall, Wenzel and Ahmed (2004) concluded that the CPGI could usefully be included in future prevalence research in Australia. They point out, however, that further research needs to be undertaken using a similar sample and a formal validation of the classification rates yielded by the CPGI. In their study, classification rates were undertaken by determining what proportion of CPGI-classified problem gamblers were experiencing significant gambling-related harm, but this method is conceptually problematic because related measures of harm (e.g., suicide ideation) are not validated measures of problem gambling. They also indicate the importance of undertaking a study that administers the scales simultaneously to the same sample in order to avoid criticisms that their own comparison samples may have differed on variables related to problem gambling scores.

Despite these positive results, McMillen, Marshall, Wenzel and Ahmed (2004) nonetheless expressed a few words of caution concerning the CPGI. As with Govoni, Frisch and Stinchfield (2001), their principal concern was that the CPGI appears to be conceptually very similar to the SOGS and VGS and could also be criticised for lacking any clear theoretical framework. Thus, even if the CPGI reliably differentiates between problem and non-problem gamblers, it is not entirely clear why this might be the case. Strong, Breen and Lejuez (2004) also point out that, although the CPGI was specifically designed to overcome the limitations of the SOGS, it includes possibly the two worst items in the SOGS (i.e., felt guilty and was criticized) both of which do not reliably differentiate between clinical and non-clinical samples. These concerns were also expressed in a personal communication between Professor Robert Ladouceur (Quebec) and the authors. Professor Ladouceur drew attention to a recent and unpublished prevalence survey in Ontario that included both the SOGS and CPGI. Both measures yielded almost the same prevalence rate, and post-assessments involving formal clinical diagnosis showed that at least 82% of those classified as problem gamblers by the CPGI were false positives. If these results were replicated in Australia, it would suggest that the CPGI may not necessarily overcome many of the problems the SOGS was supposed to overcome, probably because it also contains too many subjective items.

Table 7.13
Summary assessment of the CPGI

Dimension	Comments
Reliability	• Excellent. Acceptable Alpha and test-retest reliability
Construct validity	• Does not appear to have a strong theoretical foundation • Items are mostly subjective • Does not appear to provide a strong measure of harm
Classification accuracy	• A cut-off score of 8 yields more conservative estimates of prevalence than SOGS
Appropriate validation sampling	• Has been subjected to some validation testing with regular gamblers, but needs further testing
Dimensionality	• Excellent
External / Criterion validation	• Very good. Correlates with other measures of gambling-related harm
Concurrent validity	• Highly correlated with other measures of problem gambling, including the DSM-IV, and SOGS
Item variability	• Very good. However, items taken from the SOGS may not discriminate between regular non-problem and problem gamblers
Practicality	• Extremely easy to use. Best of all major measures
Applicability	• Acceptable validity in prevalence surveys • Little use in clinical or research settings • Items appear to be less biased towards higher SES groups or male gamblers
Comparability	• Used extensively in Canada, twice in Australia and in several European studies (see below)

7.5.5 Miscellaneous measures of problem gambling and gambling-related harm

Apart from the four principal assessment methods or screens described above, there are also a number of other instruments that have been developed to assess particular attitudes, behaviours or problems associated with gambling. A less extensive analysis will be provided for these measures because more limited information is available concerning their validity and reliability.

a. The Eight-Screen

The Eight-Screen was developed by Sullivan (1999) as a simple checklist that could be administered in various applied settings in order to ascertain whether a more formal diagnosis might be worthwhile. Items for the screen were selected from various items in existing screens, including the SOGS, DSM-IV and GA-20 questions, and validated in discussions with researchers and practitioners in the field. The formal validation of the scale involved administering a list of 35 items to clients attending a day treatment centre for problem gambling in conjunction with the SOGS. Item analysis showed that 8 of the 35 items were best able to differentiate problem gamblers from others who did not have a problem (as based upon the SOGS). In a second phase of validation, the final 8-items were administered to over 1000 patients in general practice, in conjunction with the SOGS (Table 7.14). Using a SOGS cut-off score of 5 as the criterion for problem gambling, Sullivan found that a cut-off score of 4 maximised the sensitivity and specificity of the test, and so this score was adopted as the criterion value for future administrations. In general, the scale has been found to have acceptable internal consistency and test-retest reliability.

Table 7.14
The Eight-Screen (Sullivan, 1999)

Instructions: *Most people in New Zealand enjoy gambling, whether it's lotto, track racing, the pokies, or at a casino. Sometimes, however, it can affect our health. To help us check your health please answer the questions below as truthfully as you are able from your own experience.*

1. Sometimes I've felt depressed or anxious after a session of gambling [1 =Yes that's true, 2 = No, I haven't]
2. Sometimes I've felt guilty about the way I gamble [1 = Yes, that's so, 2 = No, that isn't so.
3. When I think about it, gambling has sometimes caused me problems [1 = Yes, that's so, 2 = No, that isn't so.]
4. Sometimes I've found it better not to tell others, especially my family, about the amount of time or money I spend gambling [1 = Yes, that's so, 2 = No, I haven't]
5. I often find that when I stop gambling I've run out of money [1 = Yes, that's so, 2 = No, that isn't so.]
6. Often I get the urge to return to gambling to win back losses from a past session [1 = Yes, that's so, 2 = No, that isn't so]
7. Yes, I have received criticism about my gambling in the past [1 = yes, that's true, 2 = No, I haven't]
8. Yes, I have tried to win money to pay debts [1 = Yes, that's true, 2= No, I haven't]

Scoring: 1 point for each Yes response. Cut off score (4 or more out of 8) suggests that a person's gambling may be affecting their well-being and that a formal diagnosis using the SOGS or DSM-IV might be worthwhile.

As pointed out by Delfabbro and LeCouteur (2003), the screen has been used in a number of contexts in New Zealand including in prisons and in general practices. An adolescent version was also used in Sullivan's (2001) survey of problem gamblers in Auckland high-schools. More recently, it has been used in South Australia in a program implemented by the Department of Human Services in conjunction with the AMA and Flinders Medical Centre's Anxiety Disorders Unit.

Evaluation of the Eight-Screen

As indicated above, the Eight-Screen was designed only as a convenient screening tool to be used prior to the administration of more formal or validated measures of problem gambling. For this reason, it was not intended for use in prevalence studies or as a diagnostic tool. Although scores from the Eight-Screen tend to be quite highly correlated with the SOGS, the Eight-Screen will typically yield very high prevalence rates because it is more explicitly designed to avoid false negatives rather than false positives. Any false positives that happened to result from classifications using the screen would be identified in the formal diagnosis. In terms of its content, the Eight-Screen contains many of the subjective or "softer" attitudinal or behavioural items from the SOGS and relatively few items relating to gambling-related harm. For this reason, it provides a useful way of identifying people before they develop more severe problems, and serves as a means of assisting genuine problem gamblers find the appropriate professional help.

b. The Gambler's Anonymous (GA) 20-questions

The GA-20 is a checklist of items to assist people in identifying whether they might have a problem with gambling and therefore a need for professional assistance (presumably of the kind offered by Gamblers Anonymous). The scale is made up of a variety of different types of item. Approximately half the items relate to the consequences of gambling (e.g., disruption to family life, sleep patterns), and the rest are predominantly behavioural (e.g., "Have you ever gambled to escape worry or trouble?", "Have you ever sold anything to finance your gambling?"). Each item is scored on a Yes/ No scale with a lifetime frame of reference. Scores of 7 or more indicate the respondent is likely to be a compulsive gambler (see Thomas, Jackson and Blaszczynski, 2001 for a complete profile of the GA-20). There is very little information available concerning the development of the GA-20, and relatively few published studies have used it, or examined its psychometric properties. Nevertheless, some encouraging results have been reported in at least 3 studies (Govoni, Frisch and Stinchfield, 2001). Kuley and Jacobs (1988), for example, found some evidence supporting the construct validity of the GA-20 by showing that it correlated quite highly with people's frequency of gambling and also with gambling-related pathology (in this case, dissociation). The GA-20 was also used in an adolescent form by Derevensky and Gupta (2000) and this showed that it had good concurrent validity, as indicated by high correlations with the SOGS (0.61) and DSM-IV-J (0.68). They further showed that it had reasonably good classification accuracy using the DSM-IV-J cut-off score as a reference point. The false negative rate was only 0.60% and the false positive rate was 3.3%.

The only comprehensive evaluation of the GA-20 was a Spanish study undertaken by Ursua and Uribelarrea (1998) who administered the instrument to 127 problem gamblers who sought treatment at two self-help associations in Madrid, and also to 142 non-problem gamblers from the community. The GA-20 was found to have excellent internal consistency (Alpha = 0.94), good concurrent validity (r = 0.94 with the SOGS), and good dimensionality (only one factor that accounted for 50% of variance). The scale was also quite successful in being able to classify people into the two original groups (problem vs. non-problem) with sensitivity of 0.98 and specificity of 0.99. However, no validation was undertaken to determine how successful it was in differentiating regular non-problem from problem gamblers.

Evaluation of the GA-20

The GA-20 is generally successful in fulfilling the purpose for which it is designed. It is a valid, coherent and reliable screen that can be used in research studies and by members of the public to determine whether they might have a gambling problem. However, without further

validation, it is not possible to say whether the scale could be validly used in large-scale prevalence surveys or as an indicator of therapeutic change. Given the considerable overlap between the GA-20 and SOGS items, it is highly likely that the GA-20 would yield quite generous estimates of the prevalence of problem gambling in the community. Furthermore, as is also the case with the SOGS, the scale contains too many items that relate to behaviours and situations more likely to be characteristic of middle-class European males (e.g., arguments with partners, family problems, disruption to employment). Accordingly, it could be subject to the same criticisms that were directed at the original DSM-III classification; namely, the fact that the scale may not be entirely suitable for gamblers who are single, unmarried or unemployed. For these reasons, it may also be less amenable for use amongst older populations or those with different cultural backgrounds (e.g., Indigenous people).

c. Scale of Gambling Choices

A measure that has been used in a number of studies conducted by Mark Dickerson is the "Control of Gambling Scale" or "Scale of Gambling Choices". This measure was designed to provide a specific assessment of impaired control, a construct thought to be central to all impulse-control disorders and under-represented in many established measures of problem gambling, including the SOGS. Baron, Dickerson and Blaszczynski (1995) report that the original scale was developed from a variety of sources, including the alcohol research of Heather (1991), observational studies of off-course bettors (Dickerson, Walker, Legg-England and Hinchy, 1990) and some previous work concerning gamblers' self-perceptions of the impaired control (Corless and Dickerson, 1989). The first analysis of the scale was in several of the prevalence studies undertaken by Dickerson and others, including the first national prevalence study in 1991, the studies in Tasmania and Western Australia in 1994, and also a clinical sample (Delfabbro and LeCouteur, 2003).

The scale has been used in a variety of different forms of varying lengths. The longer version appears to have comprised 18 statements, and participants are required to respond on a 5-point response how often during the previous 6 or 12 months the behaviour had applied (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always). Items generally fell into one of 3 categories. There were 8 items concerning people's ability to control their gambling (e.g., "I have been able to resist the urge to start gambling", "I've been able to gamble less often when I've wanted to"), 6 relating to setting limits on gambling (e.g., "I tried to spend less on my gambling", "I tried to limit the amount I gamble") and 4 referring to a failure to stop gambling (e.g., "I have found it difficult to limit how much I gamble"). Baron, Dickerson and Blaszczynski (1995) found that this scale had very good internal consistency (Alpha = 0.98), had excellent concurrent validity (correlation with the SOGS r = 0.87 in Western Australia and 0.92 in Tasmania), and a clear 3 factor structure that explained over 60% of the variance between items. Further evidence supporting the construct validity of the scale has been reported by O'Connor and Dickerson (2003) in studies of poker machine and off-course racing gamblers. The scale scores were found to be significantly correlated with chasing losses, a behaviour that also features very strongly in the SOGS.

In O'Connor and Dickerson's (2003) more recent studies, a shorter 12 item version of the Scale of Gambling Choices was used. Items described by the authors are summarized in Table 7.15. O'Connor and Dickerson confirmed that this version also had very good internal consistency (Alpha = 0.94) and that all items loaded onto a single factor explained 59% of the variance. Impaired control was significantly related to other measures of gambling involvement including the frequency of participation and psychological correlates of problem gambling, including depressed mood.

Table 7.15
The 12-item Scale of Gambling Choices (Dickerson and O' Connor, 2003)

1. I have found it difficult to limit the amount I gamble
2. When I have been near a club or hotel, I have found it difficult to resist gambling
3. When I have wanted, I have been able to gamble less often (R)
4. I have been able to stop easily after a few games or bets (R)
5. I have been able to stop gambling before I spent all my cash (R)
6. I have been able to resist the urge to start gambling (R)
7. Once I've started gambling, I have an irresistible urge to continue
8. When I've wanted, I've been able to stop for a week or more (R)
9. I have been able to stop gambling before the last hotel or club closed (R)
10. Even for a single day I've found it difficult to resist gambling
11. I have been able to stop gambling before I got into debt (R)
12. I've been able to gamble less often when I've wanted to (R)

Notes: R= Reverse-scored. Wording needs to vary to be relevant to different types of gambling (e.g., TAB vs. Hotel vs. Casino)

Evaluation of the Scale of Gambling Choices

Impaired control has always been a controversial issue in the gambling literature in much the same way that coping has been a problem in discussions of psychological resilience. One problem is that the concept is potentially circular in that problem gambling by definition already implies that a person has lost control of his or her behaviour. Another problem is that it is often difficult to ascertain exactly when a person has no control over their behaviour. Dickerson's aim was to develop a measure that operationalised the concept in more objective terms. Gamblers would not be asked whether they lacked control, but about a variety of behaviours from which impairment of control could be inferred. The measure would also provide some contextual information concerning the circumstances in which this loss of control would occur. Consistent with Dickerson's (1993) previous analysis of the internal and external factors that govern people's involvement in gambling, impaired control was therefore located in all stages in the gambling process: at the point of deciding whether to gamble at all, at the point when the gambler draws close to a venue, and during sessions of gambling.

All the psychometric data indicates that this endeavour was generally successful and that this measure could be used with some confidence in future research studies. However, there nonetheless remains some aspects of the scale which necessitate some degree of caution. The first difficulty is that the scale is more descriptive than explanatory, and does not appear to be grounded in a clear theoretical framework. Although impaired control might appear to be a conceptually identifiable construct, the sorts of behaviours Dickerson describes could be the outcome of many different processes, ranging from simple conditioning to impulsivity to irrational decision-making strategies. Second, the scale does not provide any clearly identified cut-off scores, so it is not entirely clear at what point a person's impaired control is at such a stage as to indicate a problem. Third, the scale's impressive psychometric qualities, including its consistency and dimensionality may only be a result of the scale containing essentially the same items, but worded in slightly different ways. Examples of this in Table 7.15 include items 3, 6, 10 and 12. Thus, it may be that there is need for the development of a less redundant version of the scale in future validation studies.

d. The Lie-Bet Scale

The Lie-Bet scale is the shortest of all currently available assessment tools. It comprises a screen made up of two items extracted from the DSM-IV "Have you ever had to lie to people important to you about how much you gambled?" and "Have you ever felt the need to bet

more and more money?" (Johnson, Hamer, Nora, Tan, Eisenstein and Engelhart, 1997). Both items are scored Yes or No yielding a score range of 0-2. The authors developed this scale by administering a 12-item survey based upon the DSM-IV to 191 GA members and 171 non-problem gamblers who were employees in U.S. Veterans' Affairs. Using discriminant analysis, it was found that these two items best differentiated between the two groups, and were able to do so with remarkable accuracy (sensitivity = 0.99, specificity = 0.99). Further validation using 146 problem gamblers and 277 controls revealed equally impressive results (Sensitivity = 1.00 and specificity = 0.99). Despite these findings, the Lie-Bet scale does not appear to have been used in any other published study or in conjunction with other validated assessments. This means that information concerning its suitability in community prevalence studies or clinical screening is very limited. It is unclear, for example, how effectively the scale would be able to differentiate between problem gamblers and other regular gamblers. Nevertheless, the search for a very efficient 1 or 2 item surrogate for longer scales is a potentially worthwhile endeavour because such items could be readily inserted into public health surveys at minimum cost to provide useful data. The study also accords with the views of some gambling researchers who suggest that one could obtain a reasonably good assessment of problem gambling using 2 items (1. Do you have a problem? And 2. Did you answer the first question truthfully? (Wood, 2004, personal communication).

e. The Addiction Severity Index (ASI-G)

The Addiction Severity Index (ASI) is a well-recognised assessment tool in the field of addictions (McLellan, Luborsky, Cacciola, Griffith, Evans, Barr and O'Brien, 1985) and is used around the world as a detailed screening tool for people with alcohol and other substance abuse problems. The instrument includes a detailed assessment of various forms of substance misuse and related harms in seven domains: employment, family, psychiatric, other drugs, medical, legal, and alcohol (Petry, 2003). Each of these is scored 0 or 1 depending upon whether a person is assessed as having a problem in that particular area.

In the early 1990s, Lesieur and Blume (1991, 1992) developed a modified version of this index to assess gambling using the established ASI formats. The 5-item gambling component (ASI-G) was administered to 119 patients seeking help at an addictions clinic and was found to have acceptable internal consistency (Alpha = 0.73) and modest concurrent validity (r = 0.57 with the SOGS). Accordingly, Petry (2003) argued that the development of a gambling-related version would be useful because other established instruments do not provide an objective index of gambling severity.

To evaluate the ASI-G, Petry administered it to four samples: (1) 131 people seeking assistance for gambling-related problems with a positive diagnosis on the DSM-IV, (2) 212 people receiving cognitive-behavioural therapy, but not necessarily for gambling problems, (3) 45 social gamblers, and (4) 209 people receiving treatment for substance abuse disorders. The instrument comprised two sections. One section contained the SOGS (lifetime) and SOGS-R (past month), DSM-IV (NODS life-time and past year versions, see above), a time-prompted assessment of the number of days and amount of money spent gambling in the previous 30 days (Sobell and Sobell, 1992). The second section contained the 5 ASI-G questions (Table 7.16). This series of items was converted into a composite score based on the formula below Table 7.16.

Table 7.16
The Addiction Severity Scale (ASI-G) (Lesieur and Blume, 1992; Petry, 2003)

1. How many days have you gambled in the past 30 days? Include days that you gambled in any form, including informal bets, purchases of lottery or scratch tickets, bets on sporting events, casino gambling, etc.
2. How much money have you spent on gambling in total in the last month?
3. How many days in the past 30 days have you experienced gambling problems?
4. How bothered or troubled have you been by gambling problems in the last 30 days? (responses coded 0-4).
5. How important to you now is treatment for gambling problems? (responses coded 0-4)

Composite Score = (days of gambling in past 30 days / 150) + (days experienced gambling problems in past 30 / 150) + (how troubled by gambling problems/ 20) + (how important is gambling treatment/ 20) + log ($spent gambling in past 30 days) / 36.5.

The psychometric properties of the ASI-G were found to be very good. A Cronbach's Alpha value of 0.90 was obtained to confirm a very high level of internal consistency, and factor analysis showed that all items loaded on a single factor accounted for 73% of the variance. Re-administration of the ASI-G showed that it had good test-retest reliability. AGI-scores correlated moderately to strongly with other established measures such as the SOGS and DSM demonstrating its concurrent validity, and discriminant validity was confirmed by the fact that scores were significantly higher in the problem gambling group than in the other groups.

Evaluation of the ASI-G

The ASI-G was designed for administration in treatment settings, but could feasibly be used in general research projects involving gamblers recruited from the community. The measure is short, easy to administer and contains a number of items relating to involvement not contained in the problem-gambling components of other established measures. The composite index provides a single and potentially useful way of differentiating severity by combining subjective impressions with objective assessments of involvement. The only obvious limitation of the scale is that it assumes that people are able to provide accurate estimates of expenditure. As Blaszczynski, Dumlao and Lange (1997) have shown, there is no guarantee that this will be the case. Apart from the fact that the term "spent" can be interpreted in multiple ways (e.g., money through a machine, money lost, money taken along to gamble), gamblers also tend to underestimate how much they spend by up to 50% (Delfabbro and Winefield, 1996). The other problem with the scale is that item 5 might not be relevant for some gamblers. Even amongst those who are willing to admit that they have a problem, only a relatively small proportion will consider seeking help (Delfabbro and LeCouteur, 2003).

Despite these caveats, the index is consistent with the recommendations of Dickerson (1993, 1995); namely, that some attempt should be made to incorporate objective involvement data into measures of problem gambling. Dickerson's view was that problem gambling could be inferred from objective assessments of a person's level of involvement. In other words, the hope was to identify a particular level of expenditure (e.g., per week) or frequency of participation that appeared to differentiate problem gamblers from others who gambled. Unfortunately, this again assumes that one could obtain accurate estimates of involvement. Another difficulty is that one would need to consider a person's level of involvement and expenditure in relation to their disposable income and available leisure time. Clearly, this would vary substantially from one individual to another. For some people only a modest

weekly expenditure might be sufficient to create significant financial hardship, whereas, for others, much larger amounts would be required before this occurred.

f. Yale-Brown Obsessive Compulsive Scale

In a number of studies conducted in the United States, researchers have attempted to diagnose problem gambling as an obsessive compulsive disorder (OCD) by modifying well-established measures of OCD for use with gamblers. One example of this is a series of studies conducted using the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) (e.g., Hollander, DeCaria, Finkell, Begaz, Wong, and Cartwright, 1998, 2000; Zimmerman and Breen, 2000). The Y-BOCS is based on the DSM-IV classification for obsessive-compulsive disorder and comprises two subscales, one measuring obsessive thoughts, and the other compulsions. The DSM-IV defines obsessive in the following way:

> "*The person has recurrent and persistent thoughts, impulses or images that are experienced, at some time during the disturbance as intrusive and inappropriate that cause marked anxiety or distress. The thoughts, impulses or images are not simply excessive worries about real-life problems*…" (DSM-IV)

On the other hand, compulsions are defined when:

> "*The person has repetitive behaviours (e.g., hand-washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the person feels driven to perform in response to an obsession or according to rules that must be applied rigidly. The behaviours or mental acts are aimed at preventing some dreadful event or situation*…" (DSM-IV)

For OCD to be considered present, the DSM-IV also requires that the person recognise that the thoughts and behaviours are excessive and that they are distressing and time-consuming or sufficient to interfere with the person's normal routines and relationships. The Y-BOCS requires that the person identify gambling as the principal source of their obsession and then to rate the severity of their obsession (or preoccupation with gambling) on a series of items, and then to do the same for their compulsive behaviour. A summary of the items is provided in Table 7.17.

Table 7.17
The Yale-Brown Obsessive Compulsive Scale (Y-BOCS)

Identify your most frequent obsessions and compulsions:

Obsession /Compulsion Rating scale

1. Time spent on obsessions / compulsions per day (hours): 0, 0-1 hours, 1-3 hours, 3-8 hours, 8+ hours [Scale 0-4]
2. Interference from obsessions/ compulsions: None, Mild, Definite but manageable, Substantial impairment, Incapacitating [Scale 0-4]
3. Distress from obsessions / compulsions: None, Little, Moderate but manageable, Severe, Near constant, Disabling [Scale 0-4]
4. Resistance to obsessions/ compulsions: Always resists, Much resistance, Some resistance, Often yields, Completely yields [Scale 0-4]
5. Control over obsessions /compulsions: Complete control, Much control, Some control, Little control, No control [Scale 0-4]

All 5 items administered twice: once for obsessions and again for compulsions. Score range 0 (no problem) - 40 (maximum severity). Categories: 0-7 subclinical, 8-15 Mild, 16-23 Moderate, 24-31 Severe, 32-40 Extreme.

Very little is known about the reliability and validity of this scale because it is essentially a modification of an instrument designed for other purposes. However, several general comments can be made about its construct validity. As the quotes from the DSM-IV indicate, OCD is a disorder involving repetitive thoughts and behaviours which interfere with a person's capacity to perform everyday routines and duties. Most sufferers are afflicted with a profound loss of control over their lives, often suffer acute anxiety or panic attacks, and so the compulsions and obsessions, in many cases, serve as a ritual to avert a catastrophic event that always seems very near at hand. Common examples include the need to wash in order to avoid catching a disease, locking doors and windows to prevent a break-in or attack, or checking gas-lighters on a stove to ensure that a fire cannot occur. There is no question that gambling shares many similarities with these behaviours. Many gamblers have repetitive and obsessive thoughts about gambling and it is known that these can interfere with other aspects of cognitive functioning (e.g., Sharpe, 2003), and it is also true that gambling behaviour is repetitive and is driven by strong, often uncontrollable urges.

However, the fundamental difference between a genuine OCD behaviour and gambling is that any ritualistic and repetitive behaviour undertaken by gamblers is usually more strongly related to the desire to win money, rather than to avoid a catastrophic event. Similarly, when people gamble to avoid anxiety or depression, the activity is usually undertaken because of its mood enhancing qualities, rather than because the behaviour modifies the person's environment to avert perceived threats to their well-being. In other words, although there may appear to be some superficial similarity between OCD and gambling, the mechanics are not the same (Allcock and Grace, 1988; Blaszczynski and Nower, 2001). Gamblers can become obsessed or preoccupied with gambling, but this does not mean that problem gambling should be considered a genuine OCD disorder. For this reason, attempts to apply OCD measures as surrogate measures of problem gambling are probably misguided. Nevertheless, the inclusion of such measures in conjunction with formal diagnosis of problem gambling may be useful to enhance our understanding of the role of possible psychiatric co-morbidities in intensifying problematic gambling behaviour.

g. The Gambling Urge Scale

According to Raylu and Oei (2004b), another critical element in the process of addiction is a strong urge to gamble. An urge is defined as a strong "need, want or desire to gamble" (p. 100) which may influence people's decision to commence gambling on particular occasions. The stronger the urge, the more motivated or "primed" a gambler is to commence gambling. Urges provide, in a sense, the driving force or energizing force behind the behaviour and could be seen as the counterpoint to impaired control. A problem gambler could therefore be conceivably seen as one who not only has a strong urge to gamble, but who is also unable to control this urge. In light of the potentially important role of gambling urges in problem gambling, Raylu and Oei argued that there was a need to develop a formal instrument specifically devoted to this topic.

To do this, an 8-item Alcohol Urge Questionnaire (Bohn, Krahn and Staehler, 1995) was modified to accommodate gambling. The instrument and the SOGS were administered to 968 participants, including 1st year psychology students and volunteers from the community. Principal components analysis showed that 6 items loaded significantly on a single factor that accounted for 55% of the variance. These items formed the basis for the Gambling Urge Scale (Table 7.18). The scale was found to have good internal consistency (Alpha = 0.81), and reasonable concurrent validity. Urge scores were positively correlated with the SOGS (0.43) and other measures of gambling motivation and gambling-related irrational thinking (correlation range approximately 0.30-0.40).

Table 7.18
The Gambling Urge Scale (Raylu and Oei, 2004b)

1. All I want to do is gamble
2. It would be difficult to turn down a gamble this minute
3. Having a gamble now would make things seem just perfect.
4. I want to gamble so bad that I can almost feel it.
5. Nothing would be better than having a gamble right now.
6. I crave a gamble right now

All items are scored on a 7-point semantic differential scale ranging from 0 = Do not agree at all to 7 = Totally agree. This yields a score range of 0 (no urge) – 42 (very strong urge).

Evaluation of the Gambling Urge Scale

The results of this study are promising and suggest that a scale of this nature could usually be combined with other measures such as the Scale of Gambling Choices as a method for identifying people whose gambling behaviour may be problematic (potentially before significant harms have arisen). This type of scale would also appear to be a useful scale to administer in clinical settings to determine the success of treatment on gambling-related urges. However, a limitation of the current study is that the validation sample appears to comprise a significant number of 1st year psychology students who typically do not gamble a great deal. In addition, the sample recruited from the community may, or may not, have included gamblers in treatment, and appears to have contained a greater proportion of problem gamblers than typically identified in the community (SOGS 5+ prevalence was around 5%). Another concern with the scale is that some of the American-style wording, e.g., "Just perfect" and "I want to gamble so bad" may be irritating when administered to Australian populations. Furthermore, as with the Scale of Gambling Choices, the scale does not provide a clear cut-off score to indicate when a person's gambling urge is likely to be considered problematic.

h. The Inventory of Gambling Behaviour and Cumulative Signs Method

In 1982, the National Foundation for the Study and Treatment of Pathological Gambling in Washington DC developed a survey containing a substantial number of items relating to gambling and problems associated with excessive gambling. Originally 122 items were included in the instrument, but these were subsequently reduced to 81 by Zimmerman, Meeland and Krug (1985). The revised instrument contained a list of behavioural indicators derived from the original DSM-III classification and many items relating to the legal and vocational effects of gambling. Very little reliability and validity testing was undertaken using this instrument until it was resurrected and modified by Culleton (1989) as part of the development of the so-called Cumulative Signs Method. The CSM uses 23 items from the original list and divided them into 5 groupings of items, each of which provided different indicators of pathological gambling: (a) Personal, (b) Interpersonal, (c) Vocational, (d) Financial, and (e) "Hard signs" test. If any item is positively endorsed in a set of items, then the person is given a point for that area. One then adds up across the 5 possible groups to give the person a score of 0 (no problems) to 5 (problems in all areas). Culleton (1989) used an odds-ratio approach to work out the score that differentiated pathological gamblers from other groups and argued that a score of 3 or more was indicative of pathological gambling. Using this cut-off score in several Statewide surveys in the United States, Culleton found that the CSM was capable of correctly classifying over 96% of cases.

Evaluation of the CSM

The CSM was subject to a detailed review by Volberg and Banks (1990) in which it was compared with the SOGS. Volberg and Banks argued that there were flaws in the odds-ratio technique, so that it did not yield any obvious statistical advantages over a conventional cut-off score method. More importantly, they drew attention to the fact that the SOGS performed just as well as the CSM in many regards, was easier to interpret and that considerably more information was available concerning its reliability and validity. Culleton's classification of gambling-related problems into the groupings described above is useful and has been followed in most studies of gambling conducted since then (e.g., Productivity Commission, 1999). However, the idea of using his scoring method to assess problem gambling has generally not been adopted. The closest approximation to his methodology is the HARM measure adopted by the Productivity Commission in their national survey in 1999.

i. The HARM measure (Productivity Commission, 1999)

In the Productivity Commission's 1999 report, scores on the SOGS were verified by comparisons with a derived indicator called HARM. HARM was based on a list of 21 issues identified by the Commission as valid indicators of significant gambling problems (e.g., always spending more than can be afforded, been in trouble with the police because of gambling). A point was counted if the statement was true of a person during the previous 12 months. The Commission used a score of 1 or more on the entire scale (i.e., endorsement of any item) to indicate the presence of a gambling problem. Analyses showed that this measure resulted in a prevalence rate very similar to SOGS when used with a cut-off score of 5 or more. Examples of items included: "have been sacked in the last year due to gambling", "always feel guilty about gambling", "always spend more than can be afforded", and so on (see Productivity Commission, 1999, p. 6.29 for a complete list).

Evaluation of the HARM measure

These items were included only because they have good face validity (that is, they appear to be appropriate indicators of hardship caused by gambling), but there is little information available concerning the psychometrics of this scale. For example, very little is known concerning its internal consistency, dimensionality, test-retest reliability or classification accuracy. The only quality about which one could be reasonably confident is its construct validity. As a measure of harm, it is clearly able to differentiate between problem and non-problem gambling, and appears to yield results very similar to the SOGS. However, as discussed previously in this report, a focus on harm alone means that one will not be able to identify those early "career" gamblers who have problematic behaviour but few significant harms. Further research would be required to assess all of these limitations before the measure could be used consistently and in different contexts.

j. G-Map

The G-Map is a screening instrument developed by a team of counsellors and psychologists at the Break Even Problem Gambling Service at Maroondah in Victoria. The instrument was based upon a series of case-study analyses of clients conducted in the mid-1990s (Loughman, Pierce, and Sagris, 1996). The G-Map comprises 85 questions each of which is divided into 17 categories relating to different aspects of a person's gambling. Three sets of items refers to people's understanding of gambling, 4 refer to feelings; 4 groups refer to situational factors, 4 refer to self-referent attitudes that influence the person's gambling, and 2 refer to the social context of the gambling. For each of the 5 questions in each group of questions, participants respond on a 5-point scale ranging from 0 = Does not apply to me at all to 5 =

Applies to me very strongly. Scores out of 5 are then multiplied by 4 to give a score out of 20 for the question group. Thus, with 5 questions in each of the 17 groups, people can score on a scale of 0-100. Loughman, Pierce and Sagris have presented several national conference papers describing results from the G-Map that has provided useful insights into gender differences in gambling, and have shown how one can use the tool to generate a descriptive profile of different gamblers.

Evaluation of the G-Map

The G-Map items appear to have been derived largely from observation and the reported experiences of gambling clients. For this reason, it suffers from failing to provide either a clear theoretical focus or clear delineation of the models. In many ways referring to the groups of items as factors is a misnomer in that the scale does not appear to have been derived from the results of any form of factor analysis. Even if this were the case, one would be wary as to the success of the data-reduction process if this had yielded a 17-factor solution. Inspection of the groups of items (not available except from the authors) indicates considerable overlap and potential confusion in the combination of ideas. One section is clearly about beliefs and another about social context, but all the others comprise a mixture of items relating to attitudes, motivations, and coping styles. It would have been better if the original questions had been deliberately classified into these categories by the researchers, or entered into an item pool and then subjected to principal components analysis to obtain data-driven clusters of variables. As it stands, the items fall uncomfortably between the two extremes, and this makes it very difficult to specify exactly what the G-Map measures.

i. Gambling Interview Schedule / Gambling Behaviour Interview (Stinchfield, Govoni, and Frisch, 2001)

Stinchfield, Govoni and Frisch (2001) developed the GIS as a measure to supplement existing diagnostic criteria so as to provide a more complete description of gambling-related problems. Seven items for the checklist were derived from DSM-III and DSM-III-R that were not included in the DSM-IV and another 25 from focus group meetings undertaken with problem gamblers in Ontario. The final list of items is summarised in Table 7.19. All items were scored using Yes/ No responses and referred to the previous 12 months.

These items were administered to 121 problem gamblers in treatment and 300 people recruited from the general Ontario population. Psychometric analysis showed that the scale had good internal consistency (Alpha = 0. 98) and good dimensionality, with all items (except the “having been arrested”) loading on a single factor that explained 58% of the variance. The classification accuracy of the scale into the two groups was very good, with only 3% false positives and 2% false negatives. Scores on the scale were also highly correlated with the SOGS and DSM-IV (r = 0.95 and 0.96 respectively). The best or most discriminative items were “frequently gambled with larger amounts of money (Item 6)”, “Made excuses or think of reasons to justify your gambling” (Item 16), “gambling caused you to disregard the worth or value of money” (Item 8), “gambling caused you to feel depressed” (Item 10).

Table 7.19
The Gambling Behaviour Interview (Stinchfield, Govoni and Frisch, 2001)

1. Did you continue to gamble despite the fact that you could not pay your gambling debts?
2. Did you continue to gamble despite having lost your relationship with your spouse, other family members, or friends due to gambling?
3. Did you continue to gamble despite having lost your job or having been kicked out of school due to gambling?
4. Did you continue to gamble despite having lost your life savings or house due to gambling?
5. Have you continued to gamble despite having been arrested for an illegal act related to your gambling?
6. Have you frequently gambled with larger amounts of money than you intended to or for longer periods than you intended to?
7. Has your spouse or friend told you that they think you have a gambling problem?
8. Did your gambling cause you to disregard the worth or value of money?
9. When extra money was available, such as from a big win or inheritance, was gambling one of the first choices of how to spend the money?
10. Did your gambling cause you to feel depressed, for example: sad, anxious, withdrawn or tearful?
11. Did your gambling cause you to withdraw and isolate yourself from others such as your spouse or family?
12. Did your gambling cause you to have frequent feelings or remorse or guilt?
13. Had you been living in fear that your gambling will be discovered?
14. Have you been secretive about your gambling and tried to hide the evidence of your gambling?
15. As a result of your gambling, have others lost their trust in you?
16. Did you make excuses or think of reasons to justify your gambling, such as "I will win money, or I need it to calm down?"
17. Did you believe it was possible to win more than you lose?
18. Did you believe that gambling would solve your problems?
19. Did gambling cause you to neglect your health?
20. Had your sleeping habits been affected by your gambling, such as, going without sleep in order to gamble or having difficulty sleeping due to thoughts of gambling?
21. Did gambling cause you to have extreme mood swings?
22. Did arguments, disappointments and frustrations, create an urge within you to gamble?
23. When you were gambling, did you feel that there was no other "high" like it you could experience?
24. As a result of your gambling, had you thought about taking your life?
25. As a result of your gambling, have you attempted to take your life?
26. Have you gambled to fill a void or emptiness in your life?
27. Have you ever gone without necessities such as food, or left bills unpaid, in order to gamble?
28. Has your gambling caused you to have negative feelings about your self-worth or your outlook on life?
29. Has your gambling caused you to lose interest in things that used to be important to you, such as relationships, work, hobbies, family activities, friends, etc..?
30. When gambling, did you feel better about yourself?
31. Did you feel that you were in control when you gambled?
32. Did you find that you could not stop gambling until your money was gone?

Cut-off score = 10

Evaluation of the Gambling Behaviour Interview

Although the psychometric properties of this scale are satisfactory, many of the same criticisms that apply to the SOGS also apply here. First, as for SOGS, this scale also does not appear to have a clear theoretical rationale. Items relating to gambling-related harm are combined with attitudinal and behavioural items. Second, the validation sample was once again too dissimilar to the treatment sample to be able to provide a clear differentiation between people with varying degrees of gambling involvement. As a result, the scale is likely to give rise to a high rate of false positives if used in a community prevalence study. For example, when one inspects the individual items, there are many for which the level of endorsement is far above what should reasonably be expected in the general population (7.7% – 23.7%). Examples included: "told you had a gambling problem" (Item 7), "When extra money was available…was gambling one of the first choices of how to spend the money"

(Item 9), "Have you been secretive…" (Item 14), " Did you believe it was possible to win more than you lose?" (Item 17), "Had your sleeping habits been affected…?" (Item 13), "Did you feel you were in control when you gambled?" (Item 24). Another concern was the fact that three items refer to spouses and families rather than significant people, and the references to employment and houses. As indicated above, these items were originally removed from the DSM classification specifically because of their inherent bias towards the middle class.

Despite these criticisms, the study provides further insights into the sorts of item most suitable for inclusion in the future measures of problem gambling.

7.6 Literature review: Usage patterns and distribution of use

A systematic search was undertaken to ascertain the range of problem gambling measures currently being utilised around the world, but with a particular focus on Australia. This process was conducted in several stages. The first stage involved a comprehensive search of all major academic databases likely to contain articles utilising psychometric measures. A second stage involved a detailed internet search of major government and research centre websites. A third process involved the collation of conference proceedings and available hardcopy reports available in Australia from all major research centres and government departments. Only material from 1999-2004 was included because of the importance of assessing current usage patterns, and because this represents the period since the landmark Productivity Commission report.

Database searches

Stage 1 involved a search of all major databases likely to contain articles involving the administration or validation of psychometric measures. Databases included PsychINFO, Sociofile, Medpubs, Web of Science, and Sociological Abstracts. Key word searches included the following key words: pathological + gambling, problem + gambling, measures + gambling, and the names of all established measures known to the authors. The search showed that PsychINFO with keywords pathological + gambling included 95% of the articles identified by all other searches combined. A total of 466 articles with clear references to psychometric measures were obtained using PsychINFO using the keywords pathological + gambling.

Internet searches

Stage 2 involved searches of all Government, agency and key research centre webpages in Australia, Canada, and the United Kingdom. A full-list of these is contained in Appendix A in a table summarising all publications identified. Included in this search were all relevant government departments in each of the major Canadian provinces, American States, Gemini Research (Volberg) in the United States, and Gamcare in the United Kingdom. Comprehensive reviews of this work produced in 2004 confirmed that the survey list was exhaustive for the countries identified above. For other countries where less research is conducted, key word searches giving the country name (e.g., Finland + gambling + prevalence, Finland + problem gambling or pathological gambling) were entered using major search engines such as Google and AltaVista. Few additional reports, apart from those previously identified by the reviews described above, were identified using this strategy.

Conference proceedings

All articles utilising or referring to problem gambling assessment published in the *National Proceedings for Gambling Studies* were also included to ensure a complete coverage of current Australian research.

Summary of results

A total sample of 153 journal articles, conference papers and reports was obtained. These were categorised into five principal categories. Each was classified in terms of 4 characteristics: country of origin, academic area, sample type and principal measure (s) used. Country of origin and measures were easily classified, but categories had to be created for the other two variables. For sample type, it was possible to identify 5 categories:

(1) *Community prevalence studies*: Random telephone or door knock studies involving the general public

(2) *Community samples*: Studies involving non-random convenience samples of the public without a purposive selection of gamblers

(3) *Recruited gamblers*: The recruitment of people who gambled to take part in research studies, e.g., to complete surveys or take part in laboratory experiments

(4) *Clinical samples*: These referred to situations where people were administered measures in a treatment or clinical setting. Some involved samples of problem gamblers, whereas others were people receiving treatment for other addictions or co-morbidities

(5) *Student gamblers*: These include studies of college students in North America and any other study involving adult participants recruited from student populations

Classifying papers by academic area was more difficult because of the multidisciplinary nature of gambling research. For example, many psychological researchers publish in psychiatry and addictions journals, and many in these other areas publish in psychology. In addition, there are general journals such as the *Journal of Gambling Studies* and *International Gambling Studies* that publish papers from multiple disciplines. Although not entirely satisfactory, it was decided to group papers in terms of the destination journal. Gambling studies and psychology journals were combined into one category because the vast majority of articles featuring psychometrics in gambling studies journals tend to have been conducted by psychologists. Psychiatry and addiction were classified by name (e.g., *Addiction*, *Addictive Behaviors*, *American Journal of Psychiatry*). Medical journals were all those in the areas of pharmacology, gerontology, and any other area of medical science apart from psychiatry. All conference papers obtained were from the field of psychology and so these were also added to the first category. All government and consultancy reports relating to community prevalence were placed into a category entitled “Other reports”. These classifications made it possible to determine which measures were most likely to be accepted in publishable articles by respective journal editors.

Some repetition of authors and research centres was identified once the final list had been compiled and this created the concern that the results could be biased towards more prolific authors or research centres. To determine whether this was the case, all repetitions of the same author were deleted and all analyses below were repeated using the reduced sample size. The results showed quite conclusively that inclusion of the repetitions did not greatly influence the results. Percentages changed only trivial amounts (2-3%) suggesting that the summaries below provide an accurate view of the distribution of usage.

Source material: Summary characteristics

Summary characteristics for the source material is described in Tables 7.20-7.22. As indicated in Table 7.20, over 60% of articles featuring psychometric measures were identified in psychology, gambling studies or psychiatry journals. Addiction journals and community prevalence studies made up most of the remainder. Over 42% of the studies involved assessments of gamblers in treatment or clinical settings, over a fifth involved community prevalence studies, and 15% were research studies in which gamblers had been recruited from the public or from venues (Table 7.21). Table 7.22 clearly indicates that the SOGS has been the dominant measure of choice over the last 5 years. At least half of all studies and reports have used the SOGS as the principal measure, with the DSM-IV being used on 29% of occasions, and combinations of the two making up another 8%.

Table 7.20
Academic areas of identified source materials

Discipline	N (%)
Psychology / Gambling studies journals	54 (35)
Psychiatry journals	39 (26)
Medical / Pharmacology journals	7 (5)
Addiction journals	26 (17)
Other reports	28 (18)
Total	153 (100)

Table 7.21
Type of sample identified in publications

Sample type	N (%)
Clinical treatment or assessment	64 (42)
Student sample	8 (5)
Sample from general community	16 (11)
Community prevalence	32 (21)
Players recruited for research	24 (15)
Other	9 (6)
Total	153 (100)

Table 7.22
Principal measure(s) used

Measure used	N (%)
SOGS	76 (50)
DSM-IV and derivatives	44 (29)
CPGI	6 (4)
Other	11 (7)
SOGS + DSM-IV	12 (8)
SOGS + CPGI	3 (2)
Total	153 (100)

Crosstabulation analyses

The first analysis examined the relationship between usage and the academic area or context in which the research was published (Table 7.23). Several important points are to be noted from Table 7.23. The first is that there is a tendency for psychological researchers to use SOGS more often than DSM-IV, and for the reverse to hold for psychiatrists. This trend is to be expected given that psychiatrists would tend to favour the classification recommended by the American Psychiatric Association, as the peak body in their discipline. The other important trend is for a small number of medical researchers to use other measures such as the Yule-Brown OCD scale rather than the SOGS. The pattern of usage for general addiction journals is relatively similar to that observed in mainstream gambling or psychology journals, very likely because many of the authors in these journals are psychologists.

Table 7.23
Measure in relation to academic area

	N	SOGS	DSM-IV	CPGI	Other	SOGS+ DSM-IV	SOGS + CPGI
Psychology/gambling studies	54	32 (59)	17 (31)	0 (0)	2 (4)	3 (6)	0 (0)
Psychiatry	39	16 (41)	17 (44)	0 (0)	3 (8)	2 (5)	1 (3)
Medical/ Pharmacy	7	1 (14)	2 (28)	0 (0)	4 (57)	0 (0)	0 (0)
Addiction	25	13 (52)	7 (28)	0 (0)	1 (4)	4 (15)	0 (0)
Other reports	29	14 (50)	1 (4)	7 (21)	2 (7)	3 (11)	2 (7)

A second analysis examined usage in relation to the country in which the research was undertaken. This also yielded several clear trends. As indicated, the SOGS has been equally popular in Canada and in the United States, but Canadian researchers have gradually moved towards greater adoption of the CPGI particularly in prevalence research (see Table 7.24). In Australia and New Zealand, the SOGS is the dominant measure and has featured in over 80% of all published studies either alone or in combination with other measures. The SOGS has been the only measure used in South American studies, whereas the DSM-IV appears to be favoured in Europe and in Asian studies. The CPGI has been used in all recent prevalence studies of Canadian provinces, two European studies and in two Australian studies.

Table 7.24
Measure in relation to country

	N	SOGS	DSM-IV	CPGI	Other	SOGS+ DSM-IV	SOGS + CPGI
United States	52	27 (52)	17 (33)	0 (0)	6 (12)	2 (4)	0 (0)
Canada	34	17 (50)	7 (21)	5 (15)	1 (3)	1 (3)	3 (9)
Australia/ NZ	30	21 (72)	1 (3)	1 (3)	3 (10)	3 (10)	1 (3)
South America	4	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Asia/ Middle-East	5	1 (20)	3 (60)	0 (0)	0 (0)	1 (20)	0 (0)
Europe	26	6 (23)	14 (54)	2 (8)*	1 (4)	3 (12)	0 (0)
UK	4	0 (0)	2 (50)	0 (0)	0 (0)	2 (50)	0 (0)

* Secondary references reported by Volberg, Gemini Research.

A final analysis examined the usage of measures in relation to sample type. As can be observed in Table 7.25, almost 50% of studies conducted in clinical settings have used the DSM-IV and 37% have used the SOGS. In all other contexts, including studies of students, community samples, recruited players for research studies, the SOGS has been the dominant measure. In other words, the current usage patterns suggest that:

- The SOGS is considered an acceptable measure for research purposes.
- Clinical assessment tends to involve the DSM-IV as the first choice.
- The choice of measure for prevalence research depends upon the country.
- Canada clearly now favours the CPGI, North America favours the SOGS and the NODS (psychometric version of the DSM-IV classification), whereas Australian researchers may be shifting towards using the CPGI or a combination of SOGS and CPGI to ensure comparability with previous Australian studies (McMillen, Marshall, Wenzel and Ahmed, 2004).

Table 7.25
Measure in relation to sample type

	N	SOGS	DSM-IV	CPGI	Other	SOGS+ DSM-IV	SOGS + CPGI
Clinical/ treatment	63	23 (37)	30 (48)	0 (0)	6 (10)	4 (6)	0 (0)
Students	8	8 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Sample drawn from community	16	9 (56)	4 (25)	0 (0)	1 (6)	2 (13)	0 (0)
Community prevalence	32	16 (50)	3 (9)	6 (19)	0 (0)	4 (13)	3 (9)
Players recruited for research	24	17 (71)	3 (13)	0 (0)	3 (13)	1 (4)	0 (0)
Other	8	2 (25)	4 (50)	0 (0)	1 (13)	1 (13)	0 (0)

8. Feedback on material developed in the literature review

8.1 Introduction

This chapter discusses feedback from a variety of stakeholders across different professional fields. We are extremely grateful to all those who took the time and effort to reflect on the questions we raised with respect to definitions of problem gambling, gambling-related harm and gambling measurement instruments and on the literature review and who either made responses by mail, email, in person or who attended the focus groups that we arranged.

Responses that were pertinent to the questions asked were made both to the initial letter that we sent at the project's commencement and in response to the literature review. The list of those organisations and individuals that provided us with feedback by letter or email are listed in Appendix B. In addition, we held several focus groups with service providers: Gambler's Help counsellors in Melbourne, Break Even counsellors in Adelaide and counsellors who assist those with culturally and linguistically diverse backgrounds in Adelaide. The names of those who attended these sessions are also listed in Appendix B. One of the researchers also attended the NAGS conference held in Surfers Paradise in November 2004 where he spoke to a number of stakeholders about the material developed in this project.

In most cases, responses were made on behalf of organisations/government departments etc. In these cases we have used the name of the organisation rather than the name of the individual signing the letter on behalf of the organisation. In cases where individuals who responded indicated that comments were their own, rather than representing the views of the organisation that they are from we have used the person's name and indicated the organisation that the person is from only in the first reference to that person's views.

As a general point, many stakeholders considered that it would be desirable to have a single definition of problem gambling. This point was perhaps made most forcefully by the Victorian Gambling Commission:

> "*The Commission believes that adoption of a commonly used definition is more important than wrangling over particular drafts. Many stakeholders may have their own suggestions. Ultimately, a common definition is more important*".

Others are of the view that different definitions will be required for different purposes. This chapter discusses feedback with respect to the various elements that might be included in a national definition of problem gambling before making a recommendation in Chapter 9 on a definition that we think might be accepted by most stakeholders.

8.2 Industry responses

8.2.1 A single definition?

In general, there seems to be some disquiet among industry respondents about having a single national definition for problem gambling. Several industry responses focused on the need for being clear about the objectives for having a national definition:

> *"The difficulty arises as a consequence of determining the objectives and purpose of such a definition. Different objectives will result in different definitions.*"[6]

and:

[6] Australian Casino Association, letter dated 25 October 2004.

"*To be useful, the objectives for the definition need to be clearly agreed*."[7]

The Australian Gaming Council (AGC) is critical of the attempt to develop a definition that would suit most purposes:

> *"If a definition attempts to address all factors, purposes and perspectives, such as cultural, social and environmental factors, then it is likely to be less useful to serve any particular purpose*[8]

as is the NSW Gaming Industry Operators Group (the GIO):

> "*The GIO believes that definitions of problem gambling are important for both treatment and policy making purposes but has serious doubts about the usefulness of a 'one size fits all' definition, particularly in the policy making area*".[9]

The AGC argues that any measure of problem gambling should be useful in defining clinically significant levels of problem gambling, hence:

> *"… any definition should be objective, measurable, relevant to research, policy development and treatment of problem gambling*".[10]

The AGC favours a standardised definition of problem gambling and measurement methodology and had previously indicated that a consensual (biopsychosocial) construct of problem gambling should promote consistency and comparability of information across jurisdictions. Its view is that the definition needs to provide for effective referral, evaluation and treatment. The GIO suggests "… different definitions should be established for policy making and treatment purposes and suggests that multiple definitions may be required to address specific issues".

Other stakeholders (see below) have suggested that it might be useful to have different definitions for pathological gambling and problem gambling where pathological gambling is the subject of clinical diagnosis. The authors' view is that separate definitions would be useful as a definition for pathological gambling would address the GIO and others' requests for a definition that is useful for clinical diagnosis and treatment purposes, whereas the definition for problem gambling would be useful for education, intervention at an earlier stage than allowed for by clinical diagnosis and policy making. However, to develop a national definition of pathological gambling would need to be the subject of further research.

The Australian Casino Association favours a national definition:

> *"The Association considers a national definition will assist when research, policy decision-making, procedures development, are being reviewed, discussed and decided upon and will provide the ability to make reasonable comparisons between research*".

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7 Australian Gaming Council, letter dated 9 November 2004.

8 Ibid.

9 Despite its objections to a 'one size fits all' definition, the GIO propose its own definition which "is accordingly put forward on the basis that if it is considered essential by others to formulate such a definition for policy making purposes, this is the version preferred by the industry:
"*Problem gambling is characterised, for a small proportion of the community, by an apparent incapacity to exercise individual personal discipline, responsibility and control which leads to gambling behaviour which occasionally comprises periodic or continuous loss of control over time and/or money spent on gambling, resulting in adverse consequences for the gambler, and perhaps for his or her family and/or vocational pursuits, and which may extend into the wider community but which needs to be balanced against the contribution of the industry to the community and the enjoyment and entertainment derived by the vast majority of players*."

10 Ibid.

8.2.2 Elements to be included in the definition

Responses from the Australian Casino Association (ACA) and Jupiter Gaming QLD (KENO) argued that reference to addiction, illness and mental health problems should not be included in the definition, ACA state that preoccupation with gambling should not be included and Jupiter Gaming would leave out problem gambling residing on a continuum of gambling behaviours. The GIO favours the conceptualisation of problem gambling as a continuum as it reflects GIO members' experience with problem gamblers who vary in the degree of problems they are experiencing from time to time. Jupiter Gaming suggests the possibility of two definitions; distinguishing between problem gambling and more serious pathological gambling where pathological gambling has been clearly diagnosed as a medical or mental disorder.

The Australian Gaming Council argues that if reference to "loss of control" is to be included in the definition, then it should be in the "sense of a loss of control" as "loss of control" is a subjective and imprecise concept, and one over which researchers and clinicians are divided regarding how to define and measure it.

Each of the responses from industry saw the concept of harm as being vague and imprecise, and open to wide interpretation thus posing difficulties for measurement and therefore unsuitable for inclusion in the definition. The ACA indicated that a further disadvantage is the "… negative and inaccurate connotations it involves" and prefers the term "adverse consequences" to adverse harms" because the latter term is less negative. The GIO considers that "Harm" is a pejorative term".

The GIO's submission contained an extensive discussion cum criticism of problem gambling defined in terms of harm. It acknowledges that problem gambling defined in terms of the harms it gives rise to for the individual is important in the context of treatment but its view is that "… use of such a concept generally gives rise to an exclusion of virtually all individual responsibility for gambling behaviour" and draws attention to recent changes in NSW law that suggests individuals will have to accept, for public policy formulation purpose, more responsibility for their own actions than has previously been the case. The GIO submission (p. 13) states:

> "*The GIO proposes that any definition of problem gambling which is based on the concept of harm should also recognise, explicitly, the responsibility of the individual in making gambling decisions. Gambling involves the voluntary contractual assumption of risk with some expectation of expenditure.*
>
> *Many other activities involve the assumption of risk (sports activities, driving vehicles, flying etc) and in many (if not most) cases it is the very voluntary assumption of the risk that provides all, or part, of the entertainment derived from the activity.*"

The GIO states that although the concepts of "harm" and "harm minimisation" are fundamental to the legislative and regulatory regime governing gaming machines in NSW, the terminology should be clarified for the following reasons:

(a) failure to satisfy the exactitude required for statutory drafting;

(b) failure to take into account the voluntary assumption of risk inherent in all gambling activities;

(c) difficulties in defining the ambit of "harm" for the purposes of legislation and regulations;

(d) failure to take into account the individual responsibility involved in participating in gambling activities;

(e) failure to specify the 'balance' that is to be achieved between protecting individuals vulnerable to gambling problems and protecting the extensive positive contributions that gaming makes to society as a whole (through provision of employment, revenue and taxes) and to recreational players.

The GIO suggests given the importance of the terms, "harm" and "harm minimisation", in the legislation that they either be replaced [by "harm reduction"] or clarified by further definition.

The ACA suggest that the elements they recommend be incorporated into a national definition of problem gambling (loss of control, spending beyond one's means, continuum, adverse impacts) would become part of the training, practices and procedures with respect to problem gambling programs conducted by ACA members. Similarly, the Australian Gaming Council wants a definition "… that is of practical relevance in the prevention and treatment of problem gambling, including staff training and industry responsible gambling initiatives".

Reflecting the comments made above, the ACA proposes that in the definition put forward for comment that the term "impacts" be replaced with "consequences", and that the term "periodic" precedes "continuous", reflecting what tends to occur in practice as people become problem gamblers.

Jupiter Gaming is of the view that the definition put forward for comment is suitable in the Australian context as it addresses:

> *"… the key points of preoccupation with gambling, loss of control as a regular feature, (either continuous or sporadic) and a range of possible adverse effects to that individual, and the community.*
>
> *Additionally, it avoids the ambiguity, subjectivity and hence lack of measurability of 'harm' in the definition, and excludes specific reference to pathological or mental disorder ".*

The Australian Gaming Council is attracted to the Queensland Responsible Gambling Strategy definition which defines problem gambling in terms of safety and wellbeing of gambling consumers and the negative impacts to the wider community if improvements in these concepts (safety, wellbeing and negative impacts) can be made measurable.

Key points

- There is a need to be clear about the objectives for having a national definition of problem gambling.
- A single definition may not suit all purposes.
- There is perhaps a need for two definitions: one definition for pathological gambling where the condition would be capable of clinical diagnosis, underpin treatment, and which might contain reference to mental health problems; and another definition for problem gambling which would underpin education, intervention and policy making.
- Several industry responses, although not all, favour the conceptualisation of problem gambling as a continuum.
- There is no clear agreement across industry responses as to the elements that should be included in a definition of problem gambling.

8.3 Government/public policy-makers

8.3.1 Elements to be included in the definition

The Casino Control Authority and the Liquor Administration Board were of the view that all of the listed elements should be included in the definition. Other responses provided by government/policy makers suggested that reference to addiction, illness or mental health problems be removed. The Casino Control Authority was also of the view that a national definition should "… also directly cover the element of excessive time expenditure".

Phil Collins from the ACT Gambling and Racing Commission is strongly opposed to the use of "loss of control" in the definition because it reflects the mental disorder approach and it implies that some external force is manipulating people's behaviour. Likewise, Robert Chappell, Director of the Independent Gambling Authority in South Australia, suggests that the definition should avoid words suggestive of cause or clinically observable symptoms including the words "loss of control". Chappell would prefer a definition framed in terms of outcomes or consequences, one that would work for a wide range of stakeholders, not just in the clinical context in which he believes some of the elements are defined. The response from the Chair of the Casino Community Benefit Fund Trustees stated a similar view: "I do not believe it is necessary to define the nature or the causes of the problems associated with or caused by gambling in the definition".

Conversely, the Queensland Office of Gaming Regulation (QOGR) and the Department of Communities argues that "… the loss of control over either money and/or time while gambling is a key factor in subsequent adverse consequences from gambling behaviour". The NSW Department of Gaming and Racing also emphasises repeated loss of control as an aspect of problem gambling. The QOGR also support the concept of preoccupation with gambling although they recognise that it is at odds with binge gambling.

8.3.2 Gambling-related "harm"

The Department of Human Services in Victoria understands problem gambling to be a public health issue (as does the Department of Health and Human Services in Tasmania, VLGA, Department of Gaming and Racing NSW and NSW Department of Community Services) and uses Dickerson, McMillen and Hallebone et al.'s (1997) harm-based definition which the DHS has taken from the Productivity Commission (1999) report:

> "*This definition has provided DHS with a framework from which to develop, implement and monitor the provision of services to individuals who have self-identified as having problems with gambling and their families and communities*".

The Chair of the Casino Community Benefit Fund Trustees also likes Dickerson, McMillen and Hallebone et al.'s 1997 definition; it "… is better and more useful [than the definition put forward for comment]" as the definition should be … "broad and flexible enough to incorporate the range of harms" and "… this can be achieved by making reference to adverse impacts, which captures most of the points above it" [a reference to the list of elements in Q.1 of the call for comments].

The Victorian Commission for Gambling Regulation does not use a specified definition but is represented on the Regulators' Responsible Gambling Working Party which has no agreed definition of problem gambling but refers to "gambling that is a problem for individuals, their family or their community" in its discussions. (This reflects a similar view put to us by

counsellors across the three focus groups that we ran that it is preferable to talk about gambling that leads to problems, rather than to talk about problem gambling.)
The NSW Department of Gaming and Racing defines harm as:

> "*… typically any combination of financial, legal, emotional, physical and psychological distress, etc experienced by the gambler and/or his/her close associates as a result of gambling.*"

The Department argues it is essential that any definition include the direct and indirect impacts of problem gambling on others. The VLGA is of the view that the definition should take into account that access to gambling is permitted as a result of public policy, by incorporating the words, "the situation where the inducement to gamble gives rise to harm…" in Dickerson, McMillen and Hallebone et al.'s definition.

The Tasmanian Department of Health and Human Services argues the concept of harm is useful from a community education viewpoint, but that from a definitional viewpoint the concept of 'harm' or 'adverse impacts' is crucial; without the harm there would be no problem. However, the Tasmanian Department of Treasury and Finance is of the view that a definition that makes reference only to harm is insufficient:

> *"… defining problem gambling only in terms of the harm it causes is not considered practical as what constitutes "harm" will be very subjective, will depend on individual's [sic] circumstances, and may be difficult to measure*".

None of the responses received suggested that the concept of gambling-related harm was too vague to be of any practical use. The difficulty is in articulating and managing gambling-related harm according to the Casino Control Authority. The Queensland Office of Gaming Regulation and Department of Communities think that understanding gambling-related harm as a distinct concept supports its practical use. The Casino Control Authority suggests that the Productivity Commission's (1999) HARM measure and others cited provide useful benchmarks of issues that are of practical value. The Liquor Administration Board stated:

> "*… only those who seek to avoid the consequences of having gambling-related harm altered are those that genuinely say it cannot be defined or is a vague concept. That is for example manufacturers and machine operators. Any counsellor or problem gambler will understand the concept*".

The Western Australian Department for Community Development is also of the view that the definition must take account of harm upon families but also, particularly, in rural and remote areas, upon communities. Any definition must also "…be culturally sensitive to take account of problem gambling by people from Indigenous and culturally and linguistically diverse communities".

The Chair of the Casino Community Benefit Fund Trustees listed the benefits of the concept of gambling-related harms:

- it is non judgemental;
- it can be defined (eg in terms of the nature of the impacts);
- it can be quantified in terms of costs;
- it allows the impacts to be described and defined at both the individual and community level;
- it is consistent with how problems in other sectors such as drug and alcohol are defined;

- it is more conducive to public policy development along the continuum from early intervention to treatment.

8.3.3 The definition in the "Call for Comments"

The response received from Tasmanian Department of Health and Human Services indicated the definition put forward for comment would probably be suitable as a national definition although the response indicated that members of the Department would like reference to an added dimension of 'false perceptions' included in the definition.

The Casino Control Authority stated that the definition put forward for comment appears worthwhile as it emphasises the key aspects of problem gambling: mental pre-occupation, loss of control over time and/or money, and adverse impacts. However, in their view, it does not highlight the "subjective distress" associated with problem gambling that may be both a cause and impact of gambling behaviour.

Robert Chappell's view is that ".. a short pithy definition is required"; one which will be accepted for all purposes. The definition put forward for comment "… is too narrow and will exclude many problem gamblers". The Liquor Administration Board (NSW) says that the proposed definition is acceptable but lacks impact. However, it would like to see consideration of replacement of the term "preoccupation" with "compulsion", something which most other stakeholders would dislike because of its links with the mental health disorder approach to problem gambling.

The Tasmanian Department of Treasury and Finance thinks the definition put forward for comment suitable "… as it refers to both the behaviour of the individuals as well as the impacts on others". The Queensland Office of Gaming Regulation (OCGR) and Department of Communities states that the definition put forward for comment "… is sufficiently broad to encompass the diversity of experience that people with problem gambling behaviours may encounter". However, it would result in a greater problem gambling cohort being identified than is currently the case using the CPGI definition in Queensland. Although, if supported, the OCGR would consider using the definition put forward for comment, it would break down the problem gambling cohort for further policy analysis and research.

Key points

- Some responses favoured retaining "loss of control" in the definition as a key element of problem gambling; others did not as it suggests both that "external forces" are operating to affect people's behaviour and a link to mental health problems.
- Several responses suggested there is no need to have reference to the "causes" of problem gambling included in the definition.
- On the whole, government and policy makers seem to view a definition of problem gambling that takes account only of gambling-related harms as sufficient.
- No government/policy maker response regarded the concept of gambling-related harm as being too vague to be of practical use.
- Several responses viewed the definition put forward for comment as acceptable; one thought it lacked impact and another argued that a short pithy definition is required.

8.4 Researchers

We did invite responses from some of the key researchers in the field (Blaszczynski, Dickerson, McMillen, Volberg and Walker) to the material developed in the literature review. Unfortunately, we did not receive responses (other than acknowledgement of the material sent) from these persons, and so the researchers who did respond and whose responses are summarised below may not be providing a representative picture across the researchers. The key researchers named above would probably argue that their views are adequately represented in the literature review.

8.4.1 Elements to be included in the definition

Ms Ruth Kweitel (a PhD student) and Professor Felicity Allen from Monash University believe that a national definition of problem gambling should refer to mental health problems, loss of control, spending beyond one's means and problem gambling residing on a continuum of behaviours as these are the issues for problem gamblers that have been identified by Kweitel's doctoral research into poker machine gambling.

Sue Pinkerton, a problem gambling research consultant and former pokie "addict" herself, suggests loss of control, a preoccupation with gambling, spending beyond one's means and adverse impacts are the elements that should be included in a national definition of problem gambling. She would also like to see reference to adverse impacts on the gambler's emotional well-being included in the definition. Her view is that preoccupation and perceived loss of control "define the problem", but the other elements "… are useful for bringing the problem to awareness and for making sure all clinicians, researchers, media, politicians and policy makers are on the same page regarding problem gambling".

Clive Allcock proposed his own variant of the example definition:

> *"Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling to desired levels which leads to adverse impacts for the gambler, their vocational pursuits and may also affect the wider community."*

Allcock argued that this pulls out the elements of preoccupation - which may reflect enthusiasm rather than problems, and loss of control which may be seen by some as supporting an illness model (a model that he does not support). He states that this definition covers both behaviours and harms, as he suggests the definition should.

8.4.2 Gambling-related "harm"

Kweitel and Allen, and Fabiansson's views are that the concept of gambling-related harm is very vague and what constitutes harm to one person may not necessarily be harm to another. Some of Fabiansson's views have been quoted and discussed earlier in this report in the section on "Defining harm?". We won't further reiterate her views here but she does state that a definition would be useful to "… compare research results and to undertake longitudinal studies". Fabiansson makes a practical suggestion with formulating a definition of gambling-related harm:

> *"To assess what is harmful should perhaps focus more on actual gambling activities in short periods such as a week or a month …. A detailed diary procedure undertaken with people from different personal and socio-economic structures … together with other available statistical and financial data …. Studies of these kinds could come up with guidance to where the gambling activities create harm … this research methodology would not present only one definition, but rather main and part definitions that could be useful."*

In contrast to the above researchers, Pinkerton thinks that gambling-related harm is not too vague a concept and that speaking of gambling-related harm to some people e.g., politicians helps them make the connection to what they might legislate for to reduce the harm. She does find that many people who have gambling problems "… don't make the connection between harm and gambling until they have been speaking about their gambling to a professional for a while … up until they do, gambling is seen as part of the 'solution' to their difficulties rather than the predominant cause of them". This comment was reinforced by the cousellors in the focus groups that we conducted.

With reference to the proposed definition, Pinkerton suggests the word "over" be relaced with "in terms of". She also favours separate definitions for pokie addiction (her term) and 'problem gambling related to other forms of gambling'. The former would address the intrusiveness of memory loops and preoccupation with playing poker machines, a preoccupation that, according to her, does not bother most other punters. Fabiansson also states that many people who have a pokies problem don't seek help because they don't associate 'playing the pokies' with 'the activity of gambling'.

Fabiansson's views with respect to the attraction of poker machines for many problem gamblers are reflected by others. The Reverend Harry J. Herbert from the NSW Casino Community Benefit Fund thinks: "… poker machines, are purposely designed to cause a person to become addicted … [I am] inclined to add [to the proposed definition] problem gamblers have succumbed to the seduction of the gambling instrument". Similarly, the VLGA would revise Dickerson, McMillen and Hallebone et al.'s (1997) definition to

> "*… the situation where* ***inducement to gamble gives rise to*** *gambling activity which in turn gives rise to harm to the individual player, and his/her family, and may extend into the community*".

"The inclusion of the term 'inducement to gamble' pays attention to the onset of problem gambling and shifts some of the focus away from the individual player and their social context onto the true beneficiaries of problem gambling".

Key points

- Key researchers did not respond to our "Call for Comments". They would probably argue that their views are adequately represented in the literature review.
- The researchers who did make responses think "loss of control" is an important element of problem gambling although Allcock suggests the term be replaced by "difficulties in limiting time and/or money spent on gambling".
- Some think the concept of gambling-related harm is vague; others do not.
- Several responses are of the view that the definition should include reference to what might be termed the "seduction" of electronic gaming machines.

8.5 Service providers

8.5.1 A person who has a gambling problem rather than a "problem gambler"

Gambler's Help counsellors from Victoria are of the view that one national definition (that preferably correlates with overseas definitions) is desirable for comparison purposes in

prevalence studies and to underpin measuring instruments. However, they dislike the terms "problem gambling" and "problem gambler" as it defines the person with respect to gambling itself rather than the problem(s). (This theme was raised by the counsellors themselves at all three focus groups that we ran.) The counsellors and service providers advocate separating the person from his/her behaviour so that a person becomes a "person with a gambling problem" rather than a "problem gambler": "The activity is the problem, not the person". Most of the counsellors also thought that gambling behaviours should be separated from harms. This view was also reflected in the views of PGSSC and the Gambling Help W.A. Counselling Service: it is "… far more meaningful to work with the actual experience of the client rather than to focus on a definition".

8.5.2 Elements to be included in the definition

Most counsellors were of the view that reference to illness, addiction or mental health problems should not be included in a definition. However, a number of counsellors suggested that most problem gamblers in counselling are depressed and that depression is a mental health problem. One of the counsellors at the Break Even focus group held in Adelaide thought, as suggested above, that separate definitions for problem gambling and pathological gambling would be useful. A definition of pathological gambling with reference to mental health problems would be useful for health professionals. From the perspective of a health professional all of the listed elements are important aspects of assessment and treatment. The counsellor who suggested separate definitions thought that making specific reference to both mental health and gambling impacts will help to improve community awareness of the impacts of problem gambling.

"Compulsion" was seen by the Gambler's Help counsellors to be an essential element for gamblers with a problem as was loss of control over time and/or money – "a constant throughout one person's 10 year's work" with gambling clients. Self-identified problem gamblers "hate having lost control of their lives" and often refer to themselves as compulsive gamblers or addicts. The counsellors frequently hear comments along the following lines:

> *"I've always been in control of my time but…";*
>
> *"I'm smart but I can't control my behaviour"; and*
>
> *"I know I can't win but I can't control it.*"

The counsellors were of the view that preoccupation with gambling is an important feature of behaviour for gamblers with a problem: "Gamblers with a problem spend a disproportionate amount of time thinking about gambling". Most gamblers in counselling focus on the "compulsive" need to gamble rather than the money needed to gamble. Oakes from the Flinders Medical Centre stated in her comments: "The description of an uncontrollable urge to gamble (especially when they have money and time) are used by individuals to describe their presenting problem".

Julie Nelson from Gambler's Help Northern in Victoria suggests that one of the issues to be explored is whether the gambling activity meets a clinical definition: "… anecdotally it seems that gambling becomes a problem because of inadequate resources rather than a level of uncontrolled behaviour".

Gambler's Help counsellors suggested viewing problem gambling as residing on a continuum describes more accurately the escalation of gambling behaviours and allows for lapses and relapses. The Western Australian Problem Gambling Support Services Committee (PGSSC) and Gambling Help W.A Counselling Service believe that the definition should contain

reference to spending beyond one's means, loss of control and adverse impacts. Counsellors mostly deal with adverse impacts when working with problem gamblers. They do not think that "preoccupation" or "loss of control" should be elements of the definition: " "Preoccupation" appears to be presented as an independent force that is responsible for loss of control …. Suggests to problem gamblers that their gambling behaviour is beyond their control".

The Break Even counsellors and the multicultural focus group like the continuum approach to gambling, seeing it as useful for educating the public, identifying 'at-risk' gamblers and because it permits early intervention strategies. One counsellor, however, thought the continuum detracted from identifying pathological gamblers who are most in need of help.

8.5.3 Gambling-related "harm"

All counsellors at all three focus group were of the view that a more comprehensive definition than Dickerson, McMillen and Hallebone et al.'s (1997) harm-based definition is required, as they thought the definition should make reference to both behaviours and harms. One comment with respect to the Dickerson, McMillen and Hallebone et al. definition was that "it is a bit light on". At a different focus group, a counsellor said "it makes it [problem gambling] sound too simple". Others said that it is not a practical definition from the point of view of looking at improvements in problem gambling behaviours. At the Gambler's Help meeting, the group discussed the definition put forward for comment. One counsellor thought that the phrase "over time and/or money" should be taken out of the proposed definition whereas the others thought that it should be left in as defining behaviour.

That gambling-related harm is a subjective concept should not preclude its use: "Things that can't be measured aren't any less important" was one comment with which others generally agreed. The general feeling among the counsellors was that those gamblers who were receiving counselling were in counselling because they have already identified harms either to themselves or others. However, many gamblers who have problems present to other help services and their problems are not identified as deriving from gambling. In many cases, this is because the gamblers are ashamed, in others questions related to gambling are not asked of them and they don't self-disclose, and in others, especially where volunteers are used, the volunteers are likely to be judgemental with respect to the gambling behaviours (in contrast to professionals).

The PGSSC and Gambling Help W.A. Counselling Service report that gambling-related harm is not too vague a concept as it can be "measured in the actual impacts that are reported by the gambling client". Oakes believes that gambling-related harm should be more specific to include the factors included in the definition and should be classified in terms of personal, financial, work, legal, relationship and community impacts. Oakes is of the view that including impacts on the individual's **future** prospects if gambling continues is often mentioned by problem gamblers as a concern and can be a motivation to seek help (emphasis added).

8.5.4 The definition in the "Call for Comments"

Gambling Help W.A. believe that the definition of problem gambling needs to be defined by both behaviours and consequences. The PGSSC and Gambling Help W.A. Counselling Service suggest a variant of the definition put forward for comment with a change in wording similar to that proposed by Allcock (see 8.4.1):

> "*Problem gambling is characterised by the spending of more time and money on gambling than intended resulting in adverse impacts for the gambler, and perhaps for his or her family, his or her vocational pursuits and which may extend into the wider community*".

Margie Law from Anglicare Tasmania makes the point that "Unfortunately, governments and industry groups get hold of simplified definitions and their associated levels of problem gambling to prove that gambling is not a widespread problem"; and "… when defining "problem gambling" it would be useful to refer to public health models for other addictions and activities to consider at what level an activity becomes a problem".

Key points

- A person with a gambling problem should not be characterised as a problem gambler, i.e., don't define the person in relation to the activity.
- Reference to illness, addiction and mental health problems should not be in the definition.
- Some counsellors think it would be useful to have separate definitions for pathological and problem gambling.
- Loss of control, compulsion and preoccupation are key aspects of problem gambling.
- Counsellors favour the continuum approach as it is useful for education, to identify 'at-risk' gamblers, and to implement early intervention and more targeted intervention strategies according to where people are on the continuum.
- Counsellors consider it very important that the definition contain reference to both behaviours and harms.
- A definition based on "harm" alone is not a practical definition from the perspective of working with gamblers who have problems to change their behaviours.

8.6 Comments on socio-cultural aspects

8.6.1 "Problem gambling" can't be translated into many languages

Service providers and counsellors who attended a focus group in Adelaide to talk about multicultural issues told us that "problem gambling" is a term that can't be translated into many languages. For many ethnic communities gambling is a form of play, game or social activity and for people from those communities it doesn't make sense to associate the word "problem" with "gambling".

8.6.2 A single definition?

This focus group was very critical of the search for a national definition of problem gambling; claiming that it does not recognise the diversity of experience across different cultural groups. They argued that if most of the elements from Question 1 in the call for comments were incorporated into a definition, the definition would be "culturally exclusive". The focus group was rather concerned that the term "problem gambler" could be used to victimise the client. Similarly to the Gambler's Help and Break Even counsellors for the mainstream Australian community, the multicultural group raised the issue of separating the person from the gambling activity; and argued that terminology should run along the lines of "a person who has a gambling problem" rather than a "problem gambler".

People from this focus group argued that when working with ethnic communities there is a need to "normalise" gambling, so as not to stigmatise people with gambling problems and so there might be a need for different definitions depending on which definition would be of most help under particular circumstances.

For the counsellors and service providers in the multicultural focus group, any definition they would use must serve some purpose either in engaging the client or educating the community. They were very concerned that most kinds of definitions of problem gambling (and most of the elements that could be incorporated into a definition) would be seen as stigmatising. They liked the notion of a continuum of gambling behaviour as *everyone* from the non-gambler (on the extreme left-hand-side) to the pathological gambler (on the extreme right) would lie somewhere on the continuum and they also thought it useful from the point of thinking about strategies to address problem gambling from community education for non-gamblers and recreational gamblers, to early intervention strategies for 'at-risk' gamblers, to more targeted intervention strategies for problem and pathological gamblers.

8.6.3 Definitions should focus on behaviours and harms

The multicultural focus group was not all that enthusiastic about Dickerson, McMillen and Hallebone et al.'s (1997) harm-based definition. Although they found it acceptable, they disliked its focus only on the consequences of gambling. Their view was that it wouldn't assist them with either educating communities about gambling problems or with intervention strategies when assisting clients. Education and intervention are based on preventing or changing certain behaviours. Most people in the focus group made the point that when assisting clients, the preoccupation aspect is very important; helping clients come to a realisation that the amount of time they spend thinking about gambling (most of the time) is not normal. One counsellor, however, thought preoccupation carried negative connotations. However, most said that when they do engage with clients, clients do use terms such as "obsession" and "losing control".

8.6.4 Building prior relationships

As for Indigenous communities (see below), we were told that building prior relationships with most people with ethnic backgrounds is very important before attempting to talk to people about their gambling behaviours, preferably using people with CALD backgrounds. The comment was made and supported by others in the group that "Australians are 'too direct' in their dealings with CALD communities". From this point of view, community educators are extremely important. Counsellors and support services that serve multicultural communities cannot rely on persons with problems because of their own gambling or another's gambling behaviours coming to them for assistance; the community educator must go out into the communities and build up relationships and positions of trust before the gambling issue can be broached. One counsellor said that in the community she worked with, she was often broached about health issues first because of her nursing background. We were told of a person who kept "open house" in the Kurdish community, especially for youth so that they could go to his house at any time. Ultimately some of these youths who have gambling problems might broach him about their gambling issues.

Any gambler across the ethnic communities who was not in a crisis situation would not see himself or herself as a problem gambler. Only in some crisis situations will people with ethnic backgrounds seek assistance of their own accord. Even then, in many cases, gambling is not

admitted to as the problem. The counsellors and support agencies have comments made to them along these lines: "Gambling, what's the problem about gambling? I don't have any money; that's the problem." Or "My family's complaining about me not spending enough time at home". Some communities believe that problem gambling is exclusive to the rich: "I can't have a problem with gambling because I'm not rich". In European communities, admitting to problem gambling would be akin to "admitting failure" or "admitting defeat" and so gamblers with problems don't seek help. Religion can also be an issue and prevent gamblers with problems in some ethnic communities from seeking help because of the shame. In some cases, it is quite important where communities are small that help is available from someone outside the community so that knowledge of one's "shameful" problems is not spread through the community.

Many people from multicultural backgrounds don't have an understanding that services are available to help them. They are frightened that they "will get into trouble" if they seek help, or lack understanding that the government or support services are prepared to assist even though they have created the problem for themselves. In many cases, it is just less understanding than most Caucasian Australians would have about how to "use the system" to seek help, e.g., knowledge of various kinds of support services, how to access information on the Internet that prevents people with CALD backgrounds from accessing help.

In many cases, people from ethnic communities gamble because they don't have to talk when gambling so language issues are not a problem, they feel valued, it makes them feel good when they are treated well by casino or gaming room staff, they are given free food, they are sent birthday cards and invitations to events. Asians in particular like to go to the casino where they can feel a valued part of the community and can get lost in the crowd. Middle Eastern men like the status associated with going to the high roller room; "it makes them feel good". Migration and settlement issues also lead to problem gambling behaviours. One person in the focus group told us that 50 percent of people on temporary protection visas, once they had left detention, gambled because of racism, discrimination and isolation issues. In some cases immigrants gamble because they left their country for a better life in Australia and a better life means more money which they (think they) can get by gambling. In other cases, the language barrier prevents access to other social activities and that combined with the friendly staff at the casino and at gaming venues encourages immigrants to gamble.

The focus group argued that not enough research has been done on gambling in Asian or other ethnic communities in Australia and that the results of the research that they had seen was not coinciding with their own experiences when working with ethnic communities. The multicultural focus group said that any data or research that they had seen on the prevalence of problem gambling across ethnic communities was "way-underestimating" the prevalence of problem gambling. They also believe that the prevalence of problem gambling is far greater in CALD communities than among Caucasian Australians.

8.6.5 Counselling needs to be culturally and linguistically appropriate

Counselling services need to be culturally competent and linguistically appropriate (Multicultural Problem Gambling Service for NSW (MPGS) and PGSSC and Gambling Help W.A. Counselling Service). MPGS encourages its counsellors to document ethno-specific conceptions of gambling and problem gambling. Among the main concerns of MPGS is to address those cultural and linguistic nuances that may be lost in translation or interpretation. MPGS indicated that it subscribes to a conception of problem gambling along the lines of Blaszczynski (not referenced) who contends:

> "*At this stage, problem gambling can be viewed as a psychological dependence, habitual or psychosocial problem behaviour*."

MPGS also makes use of Dickerson, McMilen and Hallebone et al.'s (1997) harm-based definition.

Gambler's Help counsellors in Victoria indicated that persons with gambling problems from some ethnic communities preferred to seek assistance from counsellors who were not from the same background. Deaf persons with gambling problems are often reluctant to seek help because of the small size of the deaf community. In both cases, it is because of the shame that is sometimes associated with gambling problems and they don't want their problems becoming common knowledge within their own communities. For similar reasons, the counsellors said that there is an increasing preference for using bilingual counsellors rather than interpreters in counselling sessions.

The Gambler's Help counsellors also indicated counsellors need to be aware of practices that make people from various communities uncomfortable. Examples cited were using male versus female counsellors e.g. Turkish men should not be interviewed by female women, having the door open or closed during a counselling session – for people from some communities, it should be left open, and in some cases having a friend or family member also present at the session can make people with CALD backgrounds more comfortable. The overarching message was that counsellors needed to be aware of the sensitivities likely to be associated with persons from different backgrounds.

Julie Nelson from Gambler's Help Northern indicated that the service has had some success in working with Indigenous clients, most of whom are extended family members affected by another's gambling. She indicated that there is a reluctance to access gambling services *per se*, and is of the view that this is culturally due to "not letting white people mess with your head".

The point was made quite forcefully at the Gambler's Help focus group that counsellors should not talk to Indigenous persons about gambling problems "up-front". Prior relationships need to be built with Indigenous persons, in some cases by being involved in activities which seem to bear no relationship or very little relationship with the gambling issue, but which will ultimately assist persons who want to help Indigenous persons or communities who have gambling problems with gambling issues.

When in counselling, Indigenous persons will not generally want to make eye contact unless the issue is raised by the counsellor who indicates that eye contact is acceptable.

Key points

- The term "problem gambling" cannot be translated into many languages.
- CALD counsellors and service providers do not favour the notion of a single definition.
- CALD counsellors and service providers do favour the continuum approach to problem gambling because of its inclusiveness (*everyone* fits somewhere on the continuum), and because of its usefulness with respect to strategies to address problem gambling from community education for non-gamblers and recreational gamblers, to early intervention strategies for 'at-risk' gamblers, to more targeted intervention strategies for problem and pathological gamblers.

- A national definition should include reference to both behaviours and harms.
- Building prior relationships with most people from ethnic communities and with Indigenous Australians is very important before talking to them about their gambling behaviours and takes time.
- Many persons with CALD backgrounds who have gambling problems don't know how to, or are too scared to access help services.
- Research is "way-underestimating" the prevalence of problem gambling in CALD and Indigenous communities.
- Counselling needs to be culturally and linguistically appropriate for CALD and Indigenous communities.

8.7 Screens and instruments

8.7.1 Feedback from Victoria

According to focus group participants in Victoria, Gambler's Help counsellors are required to use a particular data-collection form, and most of the counsellors at the focus group therefore do not use any formal screens and instruments in their work. Most work with self-identified problem gamblers who are able to be referred for help without the need for DSM-IV or other screening instruments. Nevertheless, one of the counsellors in an email following the Gambler's Help focus group stated that the use of the DSM-IV in the past had definitely given her a starting point to the course of therapy that she would take people through and gave her "… a fairly immediate sense of the severity and breadth of the person's difficulty" and that she had "come to realise over the past few days just how much I miss having this information (NB. The Gamblers Help proformas no longer have this scale)" and that it was of greater informational value than she had previously been aware. Such feedback indicates that it would obviously be useful for research and public policy purposes that information be collected using a common screening instrument, and that such instruments are useful, not only for monitoring outcomes and services, but also for the process of counselling.

This view was further reinforced by another counsellor who separately provided follow-up information with respect to the "old" versus "new" data collections and who thought the data obtained by using a screening instrument should be of use to government as well. As she pointed out:

> "[*Prior to the "new" collection] all services were required to use a 'Minimum Data Set' which comprised Registration, Assessment and Case Closure forms. Within the Assessment, question 6 was based on DSM-IV to be used not only as a screen, but also to raise the clients awareness. …The collection of this data enabled reports such as the 'Client and Service Analysis No. 6' to comment on the severity of maladaptive behaviours. … I would suggest that this would be useful information to Government that is no longer collected*."

Similarly, Sarah Wooding from the Goulburn Valley Community Health Services stated that "… it is important for the field to develop statewide/national consensus on tools for assessment so that we can present valid and theoretically sound analysis of practice and benchmarks for best practice. Her ideal is "..to have a statewide assessment tool that all counsellors receive training on and to supersede current DHS assessment tool. Would like it to be a tool with scales for initial assessment and periodic review".

One of the Gambler's Help counsellors indicated his team use G-Map in some cases but different counsellors use it in different ways: some use it as a trigger to discussion if there are problems with clients opening up in early sessions and others in an attempt to discover what

triggers clients' gambling behaviours. Wooding also suggested that G-Map is an interesting tool but not always helpful given that it tends focus on external factors and not necessarily the gambling problem itself.

Another counsellor was of the view that the impact of harms cannot be measured without using some measuring instrument. The VGS was preferable because of its emphasis on the social context of gambling, but her preference was for Victoria to adopt the CPGI in the interests of comparability with other jurisdictions.

A final point raised by counsellors was the importance of training. It was suggested that training recently provided to assist counsellors conduct cognitive-behavioural interventions could be supplemented by training in the administration of psychometric tests. Such information could therefore be used "for assessment and review purposes and to guide practice and identify areas of significant concern."

Key points

- A single consistent instrument across agencies is likely to be very useful to obtain comparative information.
- There is value in being able to use psychometric assessments in counselling.
- Counsellors should receive training in how to administer psychometric instruments.
- Counsellors reported using the SOGS, DSM-IV, CPGI and G-Map, but no standard measure was used across agencies.

8.7.2 Feedback from South Australia

Break Even counsellors in South Australia are required to use SOGS. The Flinders Medical Centre also uses VGS and a Behavioural Assessment tool that is a very specific interview screen. This interview screen takes about one hour to complete and assesses co-morbidities, activities around gambling, impacts of gambling, trigger factors and gambling-related cognitions. South Australian Break Even counsellors were generally of the view that SOGS is capable of tracking the progress of clients through the service, especially when repeated at 3 months, 6 months and 12 months. Although clients are sometimes initially reluctant to complete the assessment, counsellors are usually able to convince them of the advantages of being able to track the improvements they achieve. For counsellors, the SOGS and other assessment forms are useful in illuminating the nature and extent of harms and in determining the client's status, but such assessments do not always indicate the full extent of the problems caused to families and the wider community.

Counsellors and service providers in the multicultural focus group were generally critical of the "one size fits all" approach to problem gambling, and argued that instruments should not be forced on their communities. Some questions in the non-scored section of the SOGS, for example, are seen as patronising or inappropriate. These include questions relating to income, suicide ideation and English proficiency. Income is seen by some communities to be a very personal issue, or a sign of status which would not be revealed to another person unless one was of a particularly high status in the community. Indeed, one Vietnamese counsellor said that she would *never* ask that question of a female Vietnamese client and she would judge the circumstances before asking it of a male Vietnamese client.

The discussants argued that researchers should engage with specific ethnic communities to tailor screens and instruments to each group. They also pointed out that performance assessments applied to agencies based on measurement outcomes should also take into account the fact that some cultural communities are not immediately willing to provide sensitive information, and that time should be allowed to establish appropriate relationships to enable collection of this sort of information. Other members of the focus group indicated that there were appropriate ways in which to conduct assessments with other cultural groups. One of these was to have a more general conversation around the issues before asking any questions directly, or to talk through each question without using it exactly as printed.

Key points

- The SOGS is the predominant measure used by South Australian counselling agencies.
- The SOGS is useful as a tool to track client progress.
- The VGS is used by Flinders Medical Centre (who designed it).
- Instruments need to be tailored to meet the needs of specific cultural communities and consultation should be undertaken to avoid inappropriate questions.

8.7.3 Views from New South Wales

The most comprehensive response from NSW was from the Department of Racing and Gaming which is responsible for the development and review of the NSW Government's policies and procedures relating to gambling. The Department expressed an interest in the development of a single, reliable and valid screen to measure problem gambling, and that this measure be linked to a clearly defined definition of problem gambling. The Department also indicated that the screen should be capable of measuring the "full continuum of problem gambling from slight to episodic to chronic" and be valid for use with a variety of populations (e.g., differing in age, gender, culture, locality and education) and for different gambling activities. On the whole, the Department endorsed all of the various uses identified in Chapter 7 of the report, but indicated that it was expensive and inefficient to conduct prevalence studies and encouraged the development of brief measures that might be included in more periodic public health surveys. Accordingly, they suggested the need to validate brief measures based on the more time-consuming screens currently available so that they could be included in other general surveys in the future.

The Department provided a detailed summary of the current utilisation of a variety of measures. These data showed that the SOGS was being used by over 50% of counsellors and was by far the most widely used measure in the State. Thirty-eight percent of counsellors used the DSM-IV, and approximately 20% used a variety of measures including the G-Map, Gambling Severity Index, VGS, and other miscellaneous scales. Similar information was provided by the Multicultural Problem Gambling Service for NSW that also identified a similar range of measures, including G-Map, and other miscellaneous measures presumably developed by the service for their own use, e.g., The Gambling Abstinence Self-Efficacy Scale, Temptations for Gambling Questionnaire.

Another submission from Dr. Clive Allcock from Cumberland Hospital supported the use of gambling screens, but predominantly as a form of evidence to be furnished in court proceedings. On the whole, Dr. Allcock accepted the use of screens such as SOGS and DSM-IV but re-stated many of the concerns which he has previously expressed in his conferences

and academic papers; namely, that there are fundamental flaws in some items of both scales. Many SOGS items are too soft (e.g., feeling guilty, lying about winning) and some DSM-IV items (particularly those relating to the traditional addiction model conceptualisation of gambling) are not useful in differentiating problem gamblers from others. In terms of his own clinical practice, Dr. Allcock indicated that the vast majority of gamblers with whom he consulted scored so highly on the SOGS that concerns about the relatively validity of the 5-point cut-off score did not really come into play. The vast majority of gamblers scored 10 points or higher.

Another submission by researcher, Dr. Charlotte Fabiansson, provided some useful comments concerning refinements to the methodology associated with the assessment of gambling problems. In her view, the usual practice of asking gamblers to describe behaviour that had occurred in the previous 12 months was not as effective as asking them about behaviour within shorter periods, and she suggested that daily diaries or other methods could be used to obtain more detailed information about the specific effects of excessive gambling. She also suggested that a broader range of information concerning the effects of gambling on the community should be routinely collected, e.g., the geographic distribution of gambling, statistical and financial data from venues, and how this related to the measured effects on individuals and families.

Key points

- The SOGS remains the most commonly used measure in NSW counselling agencies, and the DSM-IV the second most widely used.
- The SOGS and DSM-IV were generally seen as useful, but there was a perceived need to develop shorter measures for public health surveys and to supplement these measures with other indicators of community harm.

8.7.4 Views from Queensland

The Office of Gaming Regulation (OGR) indicated that the Queensland Gambling Help Services are encouraged to use the DSM-IV in their data collection, but pointed out that this was not mandatory, and that each agency was free to use other screening tools. As indicated in Chapter 7, the measure used in the most recent population survey in Queensland was the CPGI. The Queensland Government adopted the CPGI because it represented "a move away from the clinical approach to problem gambling." The OGR identified several positive features of the CPGI including: (1) its ability to provide a general basis for assessing the effects of Government policies, interventions and programmes, (2) the ability to describe a continuum of gambling behaviour, and (3) its emphasis on the broader social components of problem gambling. However, they also drew attention to a number of weaknesses. These include its inability to describe the broader harms in the community and why harms tend to concentrate in certain areas; its inability to explain why scores change over time, and its reliance on self-report data. It should be pointed out that all of these criticisms are arguably criticisms that apply to any psychometric measure of problem gambling, and again suggest that the measures need to be supplemented by other measures that are more capable of documenting the broader community effects of problem gambling as well the context in which the problems arise.

In response to specific questions relating to measures, the OGR requested a response from the Department of Communities. The Department reiterated the view that the CPGI was the

preferred measure in Queensland because of its established psychometric properties and the fact that it is consistent with the public health framework adopted in Queensland. At the same time, the Department criticised the arbitrary cut-off points in the CPGI used to identify varying levels of gambling risk because this made it difficult to interpret results obtained using the screen. In terms of gambling assessments in help services, they supported the use of measures that captured the harms associated with behaviour because people often sought help at a "crisis point", but also supported the inclusion of measures relating to the "loss of control" leading to that behaviour. They specifically criticised measures that relied on harm alone because this would be particularly unhelpful for younger people who typically did not have the level of responsibilities (person or financial) that would create opportunities for serious harm to occur.

The Department of Communities also emphasised the importance of validating measures in specific cultural communities because of the need to capture differences in the nature of the behaviour and in the harms arising. As an example, they drew attention to the importance of the concept of "loss of control" in the Indigenous community. In these communities, it was not so much the loss of control over behaviour that was significant, but the "loss of control of time". Spending time at venues was causing the greatest damage to families and the general community, and was leading to the "truancy of children, malnutrition, reduced cultural engagement/ continuity." These responses indicate the need to include in measures specific items relating to the disengagement caused by an excessive time commitment to gambling.

In relation to the specific content of the gambling screen, the Department supported the development of a two-part survey that classifies problem gamblers in terms of their behaviours and the harms associated with their behaviour. Such an approach has the:

> "*potential to broaden the concept of problem gambling to allow greater understanding, both socially and politically in an effort to coordinate programs and policies that can truly meet the needs of gamblers and significant others*."

It would also provide a "snapshot" of what issues the gambler may be facing and what issues needed to be resolved first. However, the Department also drew attention to the significant challenges associated with developing an appropriate "universal baseline for measuring the consequences of behaviour, given the range of individual's experience." In other words, what may be harmful to one person might not be so for another, and so it might be difficult to develop an objective measure of harm that could be used for comparison.

Key points

- The CPGI is the preferred measurement tool in Queensland, although no specific measure is mandatory for assessments conducted by problem gambling services.
- The CPGI is considered consistent with the Government's public health approach to gambling and interest in the social effects of problem gambling.
- The CPGI does not avoid the weaknesses of any psychometric instrument; namely, its reliance on self-report and inability to document the broader community-level factors contributing to problem gambling.
- There are many perceived advantages to using a two-part approach to measuring problem gambling, ie., where problematic behaviour and the harms associated with the behaviour are separated. However, it may be difficult to develop any objective measure of gambling-related harm.

8.7.5 Views from Tasmania

In a response from Anglicare Tasmania, Angela Lutz, a senior counsellor, indicated that the Tasmanian Break Even counselling network used the SOGS and were generally satisfied with it "as a general indicator of problem gambling". The Tasmanian Department of Treasury and Finance indicated that the SOGS was the preferred method for measuring the prevalence of problem gambling in population surveys. When asked what items should be included in the measures, they indicated a dislike for harm-related items because this was "subjective" and because "the degree of harm will vary depending on the person's individual circumstances". At the same time, they suggested that "*a measure that relied only on gambling behaviour may not be sufficient where a person may exhibit problematic behaviour, but this behaviour does not in itself cause significant harm*.". In particular, they drew attention to examples of people who may be able to spent large amounts of time and money gambling without incurring any harmful effects because the person does not have any family commitments. For both of these reasons, they supported a two-step approach to the assessment of problem gambling.

Key points

- SOGS is the most widely used measure in Tasmania for both population surveys and the assessment of gamblers in counselling agencies.
- Measures based on harm alone were seen as too subjective and therefore problematic.
- A measure reliant only on behaviour is also undesirable because some people have the capacity to expend considerable time and effort without incurring any significant harm.
- A two-part survey that defines gambling either in terms of harm, behaviour, or both would be preferred.

8.7.6 View from Western Australia

Very little feedback was received from Western Australia apart from the Department of Racing, Gaming and Liquor and Centrecare. These organizations indicated that the SOGS was the preferred instrument for both "pre and post testing with clients" in agencies. In their view:

> "*The SOGS is still the most widely used gambling screen in the world and therefore any resulting research results can be cross-referenced to other worldwide research. The SOGS instrument promotes considerable reflection from the client about their own gambling behaviour. This also includes reflections on the perceptions of their gambling behaviour and its effects upon them."*

The disadvantage of the SOGS was that it may lead to too many false positives and it is not well suited for use in different cultures. This is thought to be a particular problem for assessments of Indigenous clients because "*a number of the SOGS questions are not likely to elicit positive responses from this cultural group even if gambling is having problematic results*."

Key points

- The SOGS is the most widely used assessment tool in Western Australian counselling agencies.
- It has therapeutic value and allows international comparisons (although not with current Canadian research- Authors).
- The SOGS may not be entirely suitable for use in Indigenous communities.

8.8 Summary

Table 8.1 draws on the material developed in section 8.7 to set out the screens and instruments that are predominately used in each state as indicated by feedback from stakeholders. Other than Queensland's use of the CPGI definition, there appears to be no predominant use of any particular definition of problem gambling across the states other than widespread use of Dickerson, McMillen and Hallebone et al.'s (1997) harm-based definition. Stakeholder feedback indicated that preferences for definitions vary according more to the type of stakeholder than according to geographic location.

Table 8.1
Predominant screens/instruments in use by State

State	Screens/Instruments
New South Wales	SOGS, DSM-IV
Victoria	SOGS, DSM-IV, CPGI, G-Map
Queensland	CPGI
Western Australia	SOGS
South Australia	SOGS, VGS
Tasmania	SOGS

9. Conclusion

9.1 A national definition

Most stakeholders, although by no means all, are of the view that a national definition of problem gambling is desirable. There is some debate, however, as to what would be the appropriate elements of that definition. Most stakeholders who responded to our call for comments indicate a preference for a definition that contains reference to both behaviours and to harm.

Dickerson, McMillen and Hallebone et al.'s 1997 harm-based definition, currently the most widely used definition in Australia, is perceived by most of those who responded to the call for comments to be inadequate because it only contains references to the consequences of gambling. It is particularly criticised on the basis that it doesn't assist with community education about gambling behaviours and can't be used as the basis for early intervention strategies. Similar criticisms apply to the CPGI definition.

A number of the respondents to the call for comments as well as those in focus groups indicated that they would like to see reference to a continuum of gambling behaviours in the definition because it is non-judgemental (*everyone* fits somewhere on the continuum from the non-gambler right through to the 'problem' or 'pathological' gambler), it is not culturally exclusive, and it allows for education, early intervention and more targeted intervention strategies according to where people fit on the continuum.

Most respondents indicated that they would not want reference to addiction, illness or mental health problems included in a national definition of problem gambling. Several respondents indicated that it would be useful to have separate definitions for problem gambling and pathological gambling where a person would only be categorised as a pathological gambler if clinically diagnosed. This could be useful in helping that group of gamblers who do have mental health problems, and where definitions are required for legal purposes. However, to develop a national definition of pathological gambling requires further research focused on those stakeholders who need or want to make clinical diagnoses or who are required to intervene in cases of problem gambling where the problem gambler has been diagnosed with a pathological condition. Reference to addiction, illness or mental health problems in a national definition of problem gambling is clearly not acceptable to the majority of Australian stakeholders and so we have not included it in our proposed definition.

The two most contentious elements are "loss of control" and "preoccupation". Those who have the most direct contact with problem gamblers – the counsellors – are strongly of the view that these are the elements that most characterise problem gambling and that they should be included in the definition. "Losing control" and "preoccupation" (thinking about gambling all of the time or most of the time) are the phrases that problem gamblers themselves most often use to characterise their gambling behaviours.

Other stakeholders did not like the use of the terms "loss of control" and "preoccupation" because they argued that it suggests an unproven causal connection between external forces and people's behaviour and links to illness or mental health problems.

"Spending beyond one's means" was not an element that raised much discussion. It is taken for granted by most stakeholders that most problem gamblers (although not all) will be defined as such because they are experiencing financial difficulties.

The least contentious element is adverse impacts upon the gambler's personal life, family relationships, vocational pursuits and the wider community is the least contentious element. However, as noted above, most stakeholders think it is inadequate as a definition given that it contains reference only to the consequences of problem gambling, and not to the behaviours that give rise to the consequences.

The concept of gambling-related harm was not seen by most stakeholders to be too vague a concept for practical use. Most, however, recognised the subjectivity of harms, and that what would be harmful for one person would not be so for others. Most stakeholders take a very pragmatic view with respect to gambling-related harm. If a gambler or family member or friend has sought help because of problems associated with gambling, than that is because either the gambler or family member or friend has identified harm or harms and so the person seeking help warrants assistance.

The concept of gambling-related harm does raise the problem of measurement. If only those being assisted are identified as being harmed or suffering adverse consequences, any measure of gambling-related harm will fall short.

There were many varied comments about the definition put forward for comment, reflecting the above discussion of the various elements. Certainly, the removal of the words ".. a preoccupation with gambling which leads to a continuous or periodic loss of control over .." would make the definition less contentious, although those who interact most with problem gamblers – the counsellors – would probably see it as removing the most important elements of problem gambling.[11] Clive Allcock suggested a variant of the definition put forward for comment that would probably be acceptable to most stakeholders in that it contains reference to both behaviours and harms "Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling… "

However, Allcock's proposed definition and the definition that we put forward for comment contains no specific reference to a continuum which some stakeholders favoured. Several stakeholders also favoured short, sharp definitions because of their greater impact. Some stakeholders also preferred the word "consequences" to "impacts".

In the light of the discussion in this and the preceding chapter, we recommend the adoption of the following definition:

"***Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or for the community.***"[12]

Reference to "difficulties in limiting money and/or time spent on gambling" implies a continuum of gambling behaviours from those who have no difficulty (including non-gamblers) to those who have extreme difficulty so that no direct reference to a continuum need be incorporated into the definition. Our view is that the proposed definition is shorter and sharper and therefore has more impact (without being any less useful) than a definition which incorporates reference to a continuum.

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11 If reference to loss of control is left in the definition we would argue that the words "continuous" and "periodic" be interchanged as suggested by several stakeholders to more closely reflect the progression of problem gambling.

12 See footnote 3.

9.2 The advantages of the national definition

9.2.1 Stakeholders

Stakeholder feedback clearly identified the need for a national definition that incorporates reference to both gambling behaviours and to gambling-related harm. Our proposed definition of problem gambling is appropriate for most stakeholders, but may not fully meet the needs of sociologists and those adopting a medical model or pathology approach to problem gambling. It is probably an impossible task to find a national definition of problem gambling that would be acceptable to all stakeholders. Therefore, we have proposed a definition we believe will be acceptable to most.

It is clear that reference to illness, addiction, or mental health problems (or indeed any type of pathology) in a definition of problem gambling is unacceptable to most Australian stakeholders. For those preferring a pathology approach, the proposed definition encourages the use of measures only sufficient for screening purposes, or identifying those who should be referred for formal clinical assessment. For these stakeholders, the development of a definition of pathological gambling - distinct from the definition of problem gambling - where the condition of pathological gambling is capable of clinical diagnosis would be advantageous.

For sociologists, any measure that captures the proposed definition may be considered too narrowly focused on individual behaviour. Accordingly, measures of individual behaviour would need to be placed in context by supplementing them with methodologies that captured the broader social and cultural significance of the behaviour in the community in which it occurs, and how such an environment influenced the development of the behaviour and its acceptability.

Given the principal foci of their gambling-related work, Table 9.1 sets out the relevance of our proposed national definition of problem gambling to the various groups of stakeholders and the screens and instruments most appropriate to their work.

9.2.2 Specific demographic groups

Indigenous people: Even though some Indigenous people may not have the same conceptualization of time as other Australians, the proposed definition's emphasis on the temporal element is important in these communities. The actual process of gambling leads to a loss of social cohesion because it takes people away from others in their community. The inclusion of "community" in the definition as one component of harm is also particularly relevant for Indigenous people who might see the problem of individuals as having broader social implications.

Young people: The behavioural element may be more relevant because many young people may not have as many financial, vocational or social commitments that would be at risk if they gambled excessively.

Older people and others who are financially vulnerable: The harm element may be more important because of the relatively smaller expenditure required to give rise to hardship.

Table 9.1
Implications of the national definition to different stakeholders

Stakeholder	Principal focus of gambling-related work	Appropriate Measure	Relevance of national definition
Psychological Researchers	• Differentiation of problem from problem gamblers • To obtain adequate score variability for analyses • Focus on causes of gambling and behaviour	SOGS, VGS, DSM-IV	• Behavioural element is most important • The focus is on the causes of excessive gambling as indicated by expenditure patterns and its causes whether behavioural, cognitive or physiological
Social workers/ Counsellors	• Identifying problem gamblers • Monitoring change due to interventions • Community education	SOGS, VGS, CPGI	• Initial interest in the harms requiring immediate attention • Secondary need to monitor changes in behaviour over time • Educate community about links between gambling behaviour and adverse consequences
Clinical Psychologists	• Identify problem gamblers • Identify problematic behaviours, cognitions and situations • Monitor change due to interventions	SOGS, VGS, CPGI Gambling Urges	• Interest in the behavioural component of definition, i.e., the causes of excessive behaviour
Psychiatrists/ Medical practitioners	• Diagnosis of underlying pathology • Require confirmation that pathology is absent or present	DSM-IV	• Behavioural and harm element of definition only symptomatic of underlying problem • Definition only underscores the need for screening prior to formal diagnosis
Sociologists	• Identify social causes of problem gambling • Identify broader community impacts • Cultural and social meaning and function of gambling • Understand group behaviour and environmental experiences	Attitudinal surveys Qualitative methods Observational methods	• Focus on individual behaviour in definition may not capture broader social influences • Need to supplement standard psychometric measures with studies of social environment, developmental experiences, function of gambling within social groups

Stakeholder	Principal focus of gambling-related work	Appropriate Measure	Relevance of national definition
Geographers	• Identify spatial distribution of harm • Relationship between behaviour and gambling opportunities	SOGS, CPGI, VGS	• Both harm and behavioural element are important
Regulators	• To reduce harm • Efficacy of policy and regulation of gambling products on behaviour	CPGI, VGS, SOGS	• Both harm and behavioural component is important • How does regulation reduce excessive time and money spent on gambling and the associated harms?
Educators	• To reduce harm • To draw attention to the risks of gambling and problematic behaviours • Increase awareness	***SOGS, GA-20*** VGS CPGI	• Both harm and behavioural elements are important
Judiciary	• To identify acceptable explanations for offending • Are there grounds for mitigating sentences based on diminished capacity, impaired judgment?	DSM-IV	• The definition does not imply a pathology sufficient to influence court decision-making concerning the mental state of defendants • Any measure encapsulating the definition would be considered a screening tool requiring more formal diagnostic testing
Social policy/ Government services	• To reduce harm • To design appropriate services to assist those who are adversely affected	VGS	• The harm component of the definition is most important
Industry	• To identify those who appear to be gambling excessively to their detriment • Venue and product innovations to encourage responsible gambling	SOGS VGS CPGI	• The behavioural element is most important
Epidemiologists	• To identify the prevalence of problem gambling	CPGI	• The harm and behavioural elements of the definition could both be used to identify problem gamblers

9.3 Psychometric instruments: Final comments and future options

The general consensus from the feedback received was that there is a need for a consistent measurement tool in Australia to allow comparisons both across different States, but also across time. Consistent with the recent study by McMillen, Marshall, Wenzel and Ahmed (2004) in Victoria, the general view of respondents was that the CPGI should be the preferred measurement tool for population-level research, although some respondents indicated that further refinements need to be made to the CPGI to clarify the meaning of the cut-off points. On the whole, both the SOGS and DSM-IV are accepted as useful tools for counselling and assessment purposes, and respondents raised relatively few concerns about the appropriateness of specific items in each scale. In general, this feedback is relatively similar to the conclusions reached in Chapter 7; namely, that different scales are appropriate for different purposes in accordance with their design. The DSM-IV and SOGS were specifically designed to be used in counselling and clinical settings and indeed most counsellors were reasonably satisfied that they were useful in this context[13]. On the other hand, the CPGI was specifically designed for use in population surveys and this would appear to be the preferred instrument to use in all future prevalence surveys (as is already the case in Queensland). At the same time, the authors suggest that future surveys may also need to include the SOGS as well in order to allow comparisons with previous studies, in particular, the Productivity Commission's national survey.

In the authors' view, there are both short and long-term options for the measurement of problem gambling in Australia. In the short-term, the best option will be to continue to use current measures, but to combine them with other instruments that capture elements that appear to be missing or inappropriate. For example, when using the SOGS and DSM-IV for populations that are culturally diverse, or demographically distinct (e.g., older or younger people), one may not be able to rely upon these measures alone to assist in the identification of problems. For example, SOGS scores amongst older people may be artificially low if they rarely borrow money from others. Young people may score lower because of the absence of significant harms. Other cultural groups might refuse or be unable to answer borrowing questions at all. In such circumstances, it may be necessary to combine the administration of these measures with broader questions relating to typical expenditure, or involvement to assist in identifying problem gamblers. In addition, it may be necessary to include other questions relating to important issues not captured by SOGS and DSM-IV. Examples from previous chapters include a greater focus on social isolation amongst older people, and the break down in significant relationships and community roles and commitments amongst Indigenous people.

On the other hand, in the long-term, there are greater opportunities to refine existing measures so that they are better able to capture the critical elements of problem gambling. Although as McMillen, Marshall, Wenzel and Ahmed (2004) point out, it is highly unlikely that one will ever develop an ideal measure suitable for all purposes, it is nonetheless evident from the critical review in Chapter 7 that existing measures could be improved in several ways. For example, in our view, and that of respondents, one possible starting point might be to develop a measure that clearly differentiates between harm and problematic behaviour in two separate subscales. That is, a person would be classified as a problem gambler if they displayed behaviours that indicated "difficulties in the ability to limit time and/or money spent on gambling", and if they experience significant harms associated with their gambling. One would therefore be able to classify people in more than one way to identify those who were at future risk, currently at risk, or already experiencing significant problems.

[13] Canadian researchers are in the process of developing another version of the CPGI for use in clinical populations.

At the present time, the principal difficulty lies not so much in describing genuine forms of gambling-related harm, but in identifying which behaviours are genuine indicators of problematic behaviour. Our view (based upon our review of the literature and feedback from stakeholders) is that many existing items in current measures are not suitable because the prevalence rate of the items is either too high or too low. Examples of less useful items include those in the SOGS relating to borrowing money from loan-sharks or cashing securities; the physiological addiction items in the DSM relating to tolerance and withdrawal, and any items relating to "being criticised", "feeling guilty" or "lying about winning", all of which may be too commonly observed in regular non-problem gamblers. These latter items were criticised in both Thomas, Jackson and Blaszczynski's (2003) and Ben-Tovim, Esterman, Tolchard and Battersby's (1999) reports as being too subjective, and potentially less useful than more behavioural items relating to objective and observable behaviours.

If our current definition were to be adopted, it would follow that most items would fall into the latter category (i.e., behavioural), and relate primarily to difficulties in limiting the amount of time or money spent gambling. Items that would be most consistent with our definition would include:

- Spending more money than could be afforded
- Have you borrowed money or sold anything to gamble
- Neglecting important commitments or obligations because of gambling
- Wanting to stop gambling and being unable to do so (CPGI, SOGS)
- Being unable to resist the desire to gamble
- Not having enough money to meet basic household needs or other financial commitments
- Gambling being more important than anything else you might do (VGS)
- Gambling in order to win money to meet financial commitments

As indicated, many of these items are currently captured by existing scales, and it may be that a future scale could be developed that focuses solely on these items. However, as we have emphasised in Chapter 7, because the purpose of measurement instruments is also to capture a full understanding of the problem and the experiences that accompany it, the more discriminative items above could be supplemented by separate subscales comprising items relating to attitudes and other more subjective experiences. Another set of items could then be used to measure the harms caused by gambling (personal, social, vocational and legal) as the second component of the assessment instrument. Whether such an approach will eventuate or prove to be of value, of course, remains a matter of speculation. Nevertheless, it is hoped that the broad definition of problem gambling that we have provided with the dual elements included encourages further developments in Australian gambling research, most importantly:

(1) A better understanding of the harms and behavioural items that best differentiate problem gamblers from regular non-problem gamblers;

(2) The increased validity of problem gambling scales in different demographic groups and cultural communities;

(3) Ongoing attempts to understand the principles (behavioural, cognitive, physiological, geographical, sociological) that contribute to people being unable to limit the amount of time and/or money spent on gambling (the factors that so often lead to the harms

described in the original Dickerson, McMillen and Hallebone et al. (1997) definition).

9.4 Gambling screens and instruments: Conclusion

The principal purpose (or brief) of this report with respect to gambling screens and instruments was to examine the validity of existing forms of instrumentation available to measure problem gambling. Psychometric measures are useful because they provide quantifiable data, encourage consistency in the method of data collection, and provide benchmarks against which policy-makers and (perhaps most importantly) counsellors and clinicians can measure change. However, we also recognise that psychometrics are not the only strategy available to understand gambling behaviour and gambling-related harm. Numerous qualitative methods are also available, many of which are likely to be of greater value in certain Australian communities. In addition, as some respondents indicated, greater insights could also be obtained by supplementing data collected from individuals with data concerning the distribution of gambling opportunities, expenditure patterns across different venues and locations, as well as information concerning the performance of specific gaming products (e.g., machines) that differ in their characteristics.

We do not disagree that research into harm should be a critical feature of future research, but argue that studying what gamblers do (their behaviour, whether visible or otherwise) will improve understanding of problem gambling. In our view, the inclusion of behaviour in a national definition is important because it recognises the practical realities of regulation and clinical interventions, and (as indicated below) may also encourage a greater focus on the continuum model of gambling. We do not wish to imply that gamblers should be seen as being to blame for their problems, or that concern with broader regulatory, policy or accessibility issues are any less important. Instead, by shifting some of the emphasis away from harm, we hope that this will encourage greater interest in gambling in general; in particular, the experiences and characteristics of those who gamble without developing harms. One important research question that has seldom been addressed in the literature is how are some regular gamblers able to avoid developing gambling-related problems, why others are not. Another is why some young people never develop an interest in gambling despite being exposed to gambling on a regular basis. It may be that answers to these questions in research projects involving people without significant harms could provide a very useful step towards enhancing our understanding of problem gambling.

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Appendix A

Current Utilisation of Problem Gambling Measures in Adult Gambling Research

1999-2004

United States

Author	State/ City	Source	Year	Sample	Measure used
Strong et al.*	Rhode Island, USA	Personality and Individual Differences	2004	Clinical sample	SOGS
Strong et al.*	Maryland, USA	Substance Use and Misuse	2004	College students	SOGS, Gambling Attitudes and Beliefs Scale
Takushi*	Seattle, WA, USA	Journal of Gambling Studies	2004	College students	SOGS
Strong et al.*	Rhode Island, USA	Addictive Behaviors	2004	Clinical and Community sample	SOGS
Welte et al.*	Buffalo NY, USA	Addictive Behaviors	2004	Community sample	SOGS + DSM-IV
Black*	Iowa, USA	Journal of Clinical Pharmacology	2004	Clinical sample	Yale-Brown OC Scale
Melville et al.*	Louisiana	Addictive Behaviors	2004	Clinical sample	DSM-IV
Grant et al.*	Rhode Island, USA	Comprehensive Psychiatry	2003	Clinical sample	DSM-IV
Grant and Grosz*	Minnesota, USA	Journal of Geriatric Psychiatry and Neurology	2003	Clinical sample	DSM-IV
Grant and Kim*	Minnesota, USA	Acta Psychiatrica Scandinavica	2003	Clinical Sample	Yale-Brown OC scale, Gambling Symptom Assessment Scale
Meadows*	Mississippi, USA	Dissertation (Psychology)	2003	Clinical sample	SOGS
Sullivan*	Illinois, USA	Dissertation (Psychology)	2003	College students	SOGS
Alessi and Petry*	Connecticut, USA	Behavioral Processes	2003	Clinical sample	SOGS
Kausch*	Ohio, USA	Journal of Clinical Psychiatry	2003	Clinical sample	DSM-IV
Grant and Kim*	Minnesota, USA	Psychopathology	2003	Clinical sample	DSM-IV
Toce-Gerstein et al.*	Chicago, Illinois	Addiction	2003	Community prevalence	DSM-IV
Petry et al.*	Connecticut, USA	Psychiatric Services	2003	Community Sample	SOGS
Ladd et al.*	Connecticut, USA	Journal of Geriatric Psychiatry and Neurology	2003	Recruited gamblers	SOGS
Petry*	Connecticut, USA	Addictive Behaviors	2003	Clinical sample	SOGS
Grant et al.*	Minnesota, USA	International Clinical Pharmacology	2003	Clinical sample	Yale-Brown OC Scale
Petry*	Connecticut, USA	Journal of Mental and Nervous Disease	2003	Variety	Addiction Severity Index

United States (continued)

Author	State/ City	Source	Year	Sample	Measure used
Ladd and Petry*	Connecticut, USA	Experimental and Clinical Pharmacology	2003	Clinical sample	Addiction Severity Index
Kuentzel et al.*	Detroit, USA	North American Journal of Psychology	2003	Clinical sample	DSM-IV
Slutske et al.*	Missouri, USA	Journal of Abnormal Psychology	2003	Prevalence-Adolescence to Adulthood	DSM-IV
Volberg	Arizona, USA	Report to Arizona Lottery	2003	Community prevalence	SOGS + NODS
Broffman*	Boston, USA	Dissertation (Psychology)	2002	Clinical sample	DSM-IV
Greco-Gregory*	San Francisco, USA	Dissertation (Psychology)	2002	Recruited gamblers	SOGS
Shaffer et al.*	Boston, USA	Psychiatric Services	2002	Homeless people in community	DSM-IV + MAGS
Petry and Kiluk*	Connecticut, USA	Journal of Nervous and Mental Disease	2002	Clinical sample	SOGS
Ladd and Petry*	Connecticut, USA	Experimental and Clinical Psychopharmacology	2002	Clinical sample	SOGS
Shaffer and Hall*	Boston, USA	Journal of Social Psychology	2002	Casino employees	SOGS
Breen and Zimmerman	Providence, USA	Journal of Gambling Studies	2002	Clinical sample	DSM-IV
Grant and Kim *	Minnesota, USA	Annals of Clinical Psychiatry	2002	Clinical Sample	DSM-IV
Grant and Kim*	Minnesota, USA	Psychiatric Quarterly	2002	Clinical sample	DSM-IV
Ledgerwood and Downey*	Detroit, USA	Addictive Behaviors	2002	Clinical sample	SOGS
Volberg	Nevada, USA	Report for the Nevada Department of Human Resources	2002	Community prevalence	SOGS + NODS
Platz and Millar*	Nevada, USA	Journal of Leisure Research	2001	University students	SOGS
Grant and Kim*	Minnesota, USA	Journal of Clinical Psychiatry	2001	Clinical sample	DSM-IV
Kim et al.*	Minnesota, USA	Biological Psychiatry	2001	Clinical sample	DSM-IV
Frost et al.*	Northampton, USA, MA	Journal of Gambling Studies	2001	Community sample	SOGS
Langenbucher et al.*	New Jersey, USA	Psychology of Addictive Behaviours	2001	Clinical sample	SOGS
Oster and Knapp*	Nevada, USA	Psychology and Education	2001	University students	SOGS
Welte et al.*	Buffalo, USA	Journal of Studies on Alcohol	2001	Community sample	SOGS, DSM-IV
Gullickson and Hartmann	Michigan, USA	Report for the Michigan Dept. of Community Health	2001	Community prevalence	SOGS
Volberg	Oregon, USA	Gemini Research	2001	Community prevalence	SOGS + NODS
Hollander et al.*	New York, USA	Biological Psychiatry	2000	Clinical sample	Yale-Brown OCD Scale
Slutske et al.	New York, USA	Archives of General Psychiatry	2000	Community sample	DSM-IV

United States (continued)

Author	State/ City	Source	Year	Sample	Measure used
Petry*	Connecticut, USA	American Journal on the Addictions	2000	Clinical sample	SOGS
Petry*	Connecticut, USA	Addiction	2000	Clinical sample	SOGS
Volberg	North Dakota, USA	Gemini Research	2000	Community prevalence	SOGS + NOGS
Hall et al.*	Baltimore, USA	American Journal of Psychiatry	2000	Clinical sample	DSM-IV
Anderson*	Illinois, USA	Journal of Offender Rehabilitation	1999	Corrections population	SOGS
Wilson et al.	Delaware, USA	Health and Social, Delaware	1999	Community prevalence	SOGS

Canada

Author	City	Journal	Year	Sample	Measure used
Ladouceur*	Quebec City, Canada	Addictive Behaviors	2004	Recruited gamblers	DSM-IV
Schrans and Shellinck	Nova Scotia	Report to the Novia Scotia Office of Health Promotion	2003	Community prevalence	CPGI
Ferguson*	Toronto, Canada	Dissertation (Psychology)	2003	Community sample/ research	DSM-IV
Jefferson and Richard*	New Brunswick, Canada	Journal of Gambling Studies	2003	Recruited gamblers	SOGS
Wiebe	Manitoba, Canada	Dissertation	2003	Community prevalence	SOGS
Toneatto et al.*	Ontario, Canada	Canadian Journal of Psychiatry	2003	Clinical sample	SOGS
Ladouceur et al.*	Quebec City, Canada	Addiction	2003	Recruited gamblers	SOGS
Frisch et al.	London, Ontario	University of Windsor	2003	Community sample	Windsor Problem gambling screen for older adults
Brunelle et al.*	Montreal, Canada	Psychology of Addictive Behaviors	2003	Clinical sample	SOGS
Ladouceur et al.*	Quebec City, Canada	Behavior Research and Therapy	2003	Clinical sample	DSM-IV
Newman and Thompson*	Alberta, Canada	Suicide and Life Threatening Behavior	2003	Community prevalence	DSM-IV
Volberg and Ipsos-Reid	British Columbia	Report to the Ministry of Safety	2003	Community prevalence	CPGI + SOGS
Wiebe and Cox*	Manitoba, Canada	Canadian Journal of Psychiatry	2001	Community prevalence	SOGS
Doiron and Nicki*	Prince Edward Island, Canada	Canadian Journal of Psychiatry	2001	Community Prevalence	SOGS, CPGI
Hodgins and Engel*	Calgary, Canada	Journal of Nervous and Mental Disease	2002	Clinical sample	SOGS
Toneatto and Brennan*	Toronto, Canada	Addictive Behaviors	2002	Clinical Sample	SOGS

Canada (continued)

Author	City	Journal	Year	Sample	Measure used
Patton et al.	Manitoba, Canada	Report to the Addictions Foundation of Manitoba	2002	Community prevalence	CPGI
Wynne	Saskatchewan, Canada	Saskatchewan Health	2002	Community prevalence	CPGI
Baboushkin et al.*	Montreal, Canada	Journal of Applied Social Psychology	2001	University students	SOGS
Loba et al.*	Nova Scotia, Canada	Journal of Gambling Studies	2001	Recruited players	SOGS
Tavares et al.*	Calgary, Canada	Journal of Gambling Studies	2001	Clinical sample	DSM-IV
Diskin and Hogkins*	Calgary, Canada	Canadian Journal of Behavioral Science	2001	Recruited players	SOGS
Ladouceur et al.*	Quebec City, Canada	Journal of Mental and Nervous Disease	2001	Clinical sample	DSM-IV
Focal Research	New Brunswick, Canada	Report to the Department of Health and Wellness	2001	Community prevalence	CPGI
Wiebe et al.	Ontario, Canada	Report by the Responsible Gambling Council	2001	Community prevalence	CPGI
Cox et al.*	Manitoba, Canada	Canadian Journal of Psychiatry	2000	Community prevalence	SOGS
Lepage et al.*	Quebec City, Canada	Community Mental Health Journal	2000	Community sample	SOGS
Getty et al.	**Windsor, Ontario**	**Journal of Gambling Studies**	**2000**	**Clinical sample**	**SOGS**
Jacques et al.*	Quebec City, Canada	Canadian Journal of Psychiatry	2000	Community sample	SOGS
Hodgins et al.*	Calgary, Canada	Journal of Gambling Studies	1999	Community sample	SOGS
Beaudoin et al.*	Manitoba, Canada	Canadian Journal of Psychiatry	1999	Clinical sample	SOGS + DSM-IV
Ladouceur et al.*	Quebec City, Canada	Canadian Journal of Psychiatry	1999	Community prevalence	SOGS
Ladouceur and Sylvain*	Quebec City, Canada	Anuario de Psicologia	1999	Clinical sample	DSM-IV
Doiron and Nicki	Prince Edward Island, Canada	New Brunswick Department of Health and Social Services	1999	Community prevalence	SOGS + CPGI

Australia and New Zealand

Author	City	Journal	Year	Sample	Measure used
Joukhador et al.	Sydney, Australia	Journal of Gambling Studies	2004	Clinical sample + recruited gamblers	SOGS
Evans and Delfabbro	Adelaide, Australia	Journal of Gambling Studies	2004	Community sample	SOGS
Sharpe*	Sydney, Australia	Journal of Gambling Studies	2004	Clinical sample	SOGS
Raylu and Oei*	Brisbane, Australia	Psychology of Addictive Behaviors	2004	Community sample	Gambling Urge Questionnaire (GUS), SOGS
Rodda et al.*	Melbourne, Australia	Journal of Gambling Studies	2004	Recruited gamblers	SOGS
Delfabbro et al.	Adelaide, Australia	NAGS paper, under review	2004	Recruited gamblers	SOGS
Abbott et al.*	Auckland, New Zealand	Substance Use and Misuse	2004	Community prevalence	SOGS
Dickerson and O'Connor*	Sydney-Adelaide, Australia	Journal of Gambling Studies	2003	Recruited gamblers	Scale of Gambling Choices
Lahn	Canberra, Australia	NAGS Proceedings	2003	Corrections sample	SOGS
Clarke*	Palmerston Nth., New Zealand	New Zealand Journal of Psychology	2003	University students	SOGS
Cooper et al.	Ballarat, Australia	NAGS Proceedings	2003	Recruited gamblers	SOGS
Boyer and Dickerson*	Sydney, Australia	Addiction	2003	Recruited gamblers	Scale of Gambling Choices
McCormack et al.	Melbourne, Australia	NAGS Proceedings	2002	Community sample of older Australians	DSM-IV
Matarese et al.	Sydney, Australia	NAGS Proceedings	2002	Recruited gamblers	SOGS
Ohtsuka and Hyam	Melbourne, Australia	NAGS Proceedings	2002	Recruited gamblers	SOGS
Milton et al.*	Sydney, Australia	Journal of Gambling Studies	2002	Clinical sample	DSM-IV + SOGS
Sellman et al.*	Christchurch, New Zealand	Substance Use and Misuse	2002	Clinical sample	DSM-IV + SOGS
Maccallum and Blaszczynski*	Sydney, Australia	ANZ Journal of Psychiatry	2002	Clinical sample	SOGS
Department of Treasury	Queensland, Australia	Report from the Queensland Government	2001	Community prevalence	CPGI
Tremayne et al.	Canberra, Australia	Australian Institute for Gambling Research	2001	Community prevalence	SOGS
Roy Morgan Research	Tasmania, Australia	Australian Institute for Gambling Research	2001	Community prevalence	SOGS
Blaszczynski et al.	Sydney, Australia	Gambling Research Unit, Sydney University	2001	Recruited gamblers	SOGS
Thomas and Moore	Melbourne, Victoria	NAGS Proceedings	2001	Recruited gamblers	SOGS

Australia and New Zealand (continued)

Author	City	Journal	Year	Sample	Measure used
SA Dept of Human Services	Adelaide, Australia	Report from the Department of Human Services	2001	Community prevalence	SOGS
Abbott et al.	Auckland, NZ	Department of Internal Affairs	2000	Corrections sample	SOGS + DSM-IV
Scannell et al.*	Sydney, NSW	Journal of Gambling Studies	2000	Recruited players	Scale of Gambling Choices
Kweitel and Allen*	Melbourne, Australia	North American Journal of Psychology	2000	Recruited gamblers	SOGS
Kyngdon and Dickerson	Sydney, Australia	Addiction	1999	Recruited gamblers	SOGS, Scale of Gambling Choices
Baron and Dickerson	Sydney, Australia	Journal of Gambling Studies	1999	Recruited gamblers	SOGS, Scale of Gambling Choices
Laidlaw	Melbourne, Australia	NAGS Proceedings	1999	Clinical sample	SOGS

South America

Author	Country or City	Journal	Year	Sample	Measure used
Martin et al.*	Sao Paolo, Brazil	Addictive behaviors	2004	Clinical sample	SOGS
Oliviera et al.*	Sao Paolo, Brazil	Revista Brasiliera de Psiquiatria	2002	Clinical + community sample	SOGS
Oliviera and Silva*	Sao Paolo, Brazil	Journal of Gambling Studies	2001	Community sample	SOGS
Oliviera et al.*	Sao Paolo, Brazil	Substance Use and Misuse	2000	Recruited gamblers	SOGS

Asia / India / Middle-East

Author	Country or City	Journal	Year	Sample	Measure used
Lin et al.*	Taiwan	Psychiatry and Clinical Neurosciences	2004	Corrections sample	DSM-IV
Jaisoorya et al.*	Bangalore, India	Comprehensive Psychiatry	2003	Clinical sample	DSM-IV
Wong and So*	Hong Kong	American Journal of Psychiatry	2003	Community prevalence	DSM-IV
Duvarci and Varan*	Turkey	Turk Psikiyatri Dergisi	2001	Clinical sample	SOGS
Duvarci and Varan*	Izmir, Turkey	Scandinavian Journal of Psychology	2000	Clinical sample	DSM-IV + SOGS

Europe

Author	Country or City	Source	Year	Sample	Measure used
Coco and Nacci*	Palmermo, Italy	Journal of Clinical Neuropsychiatry and Clinical Neuriosciences	2004	Clinical sample	DSM-IV
Meroni et al.*	Rome, Italy	Journal of Clinical Pharmacology	2004	Psychiatric hospital	Yale-Brown OC Scale
Lapez*	Madrid, Spain	Clinica y Salud	2004	University students	SOGS
DeFuentes-Merillas*	Amsterdam, Holland	Addiction	2004	Recruited gamblers	DSM-IV
Nabelek and Vongrej*	Slovakia	Ceska a Slovenska Psychiatrie	2003	Community Sample	DSM-IV
DeFuentes-Marilla et al.*	Amsterdam, Holland	Addiction	2003	Recruited gamblers	SOGS + DSM-IV
Janne	Finland	Report to Ministry of Social Affairs and Health	2003	Community prevalence	SOGS
Ibanez et al.*	Madrid, Spain	Journal of Clinical Psychiatry	2003	Clinical sample	DSM-IV
Goetessam and Johansson*	Norway	Addictive Behaviors	2003	Community prevalence	DSM-IV
Pallanti et al.*	Florence, Italy	Journal of Clinical Psychiatry	2002	Clinical sample	DSM-IV
Labrador-Encinas et al.*	Madrid, Spain	Psicothema	2002	Clinical sample	DSM-IV
Martinez and Venegas*	Granada, Spain	Addicciones	2002	Clinical sample + Community	DSM-IV
Volberg (cited)	Denmark	Unknown	2002	Community prevalence	CPGI
Volberg (cited)	Iceland	Unknown	2002	Community prevalence	CPGI
Bondolfi and Ferrero*	Geneva, Switzerland	Swiss Journal of Psychiatry	2002	Community Prevalence	SOGS
Volberg et al.*	Sweden	Acta Psychiatrica Scandinavica	2001	Community Prevalence	SOGS + DSM-IV
Ibanez et al.*	Madrid, Spain	American Journal of Psychiatry	2001	Clinical sample	DSM-IV
Savron et al.*	Bologna, Italy	Revista de Psichiatria	2001	Clinical sample	SOGS
Echeburua et al.*	Spain	Behavioral and Cognitive Psychotherapy	2001	Clinical sample	DSM-IV
Gonzalex-Ibanez*	Barcelona, Spain	Anuario de Psicologia	2000	Clinical sample	DSM-IV
Arbinaga-Ibarzabal*	Huelva, Spain	Annales de Psicologia	2000	Community sample	SOGS
Echeburua et al.*	Spain	Behavior Therapy	2000	Clinical sample	DSM-IV
Fernandez-Alba-Luengo et al.*	Spain	Psicothema	2000	Clinical sample	DSM-IV
Aymami et al.*	Barcelona, Spain	Anuario de Psicologia	1999	Clinical Sample	DSM-IV
Fernandez-Montalvo*	Pamplona, Spain	Psicologia Conductal	1999	Recruited players	SOGS
Ronnberg et al.	Sweden	National Institute for Public Health	1999	Community prevalence	SOGS + DSM-IV

United Kingdom

Author	Country or City	Source	Year	Sample	Measure used
Parke et al.*	Nottingham, UK	Addiction Research and Therapy	2004	Clinical sample	DSM-IV
Orford et al.	London, UK	Gamcare	2003	Community prevalence	DSM-IV and SOGS
Orford et al.	London, UK	International Gambling Studies	2003	Community prevalence	DSM-IV + SOGS
Fisher*	UK	Journal of Gambling Studies	2000	Casino patrons	DSM-IV

Appendix B

Responses to "Call for Comments"

Industry responses:

Chris Downy
Executive Director
Australia Casino Association

Ross Ferrar
Executive Officer, AGGMA
for NSW Gaming Industry Operators Group

Vicki Flannery
Chief Executive
Australian Gaming Council

Rohan Martin
Responsible Gambling and Community Relations Manager
TABCORP Holdings Limited

Bill Horman
General Manager
Community Affairs
Crown Casino (on behalf of Crown and Burswood Casinos)

Scott Wright
General Manager
Jupiters Gaming QLD (KENO)

Government/policy-maker responses

D.B. Armati
Chairperson
Liquor Administration Board, New South Wales

Pauline Bagdonavicius
Executive Director
Program and Sector Development
Department for Community Development, Western Australia

Caroline Brown
Acting Director
Children and Families Division
Department of Health and Human Services (Tasmania)

D.W. Challen
Secretary
Department of Treasury and Finance, Tasmania

Robert Chappell
Director
Independent Gambling Authority, South Australia
(Comments reflect Chappell's own views, they are not an IGA response.)

Ian Dunn
Department of Justice
Victorian Commission for Gambling Regulation

Mark England
Research Officer
New South Wales Casino Control Authority

David Ford
Executive Director
Queensland Office o Gaming Regulation
Queensland Treasury

Rev. Harry J. Herbert
Chair
Casino Community Benefit Fund, NSW

Kathryn Lamb
Director
Family and Community Support Branch
Department of Human Services, Victoria

Researchers

Clive Allcock
President
NSW Gambling on Problem Gambling
(letter and email reflecting his own views)

Charlotte Fabiansson
University of Western Sydney

Ruth Kweitel and Professor Felicity Allen (joint submission)
Faculty of Medicine
Monash University

Sue Pinkerton
Problem Gambling Research Consultant, Anti Pokies Activist, Former Pokies Addict

Rob Simpson
Chief Executive Officer
Ontario Problem Gambling Research Centre
Canada

Service Providers

D.I. Halge,
Acting Director,
Department of Racing, gaming and Liquor, Western Australia
On behalf of Problem Gambling Support Services Committee, Department of Racing, Gaming and Liquor, and Gambling Help W.A., Centrecare (co-ordinated response)

Margie Law
Anglicare, Tasmania

Angela Lutz
Anglicare Tasmania counselling team, Hobart

Debra Nelson
Break Even Project Officer
UnitingCare Wesley, Port Pirie SA

Julie Nelson
Gambler's Help Northern, Victoria

Multicultural Problem Gambling Service for NSW

Jane Oakes
Intensive Therapy Service for Problem Gamblers,
Centre for Anxiety and Related Disorders
Flinders Medical Centre

Namita Trensky
Relationships Australia, Ballarat

Sarah Wooding
Goulburn Valley Community Health Services, Shepparton

Attendees at focus groups

Victorian Gambler's Help counsellors, Melbourne, November 2004

Eddie Chapman
Council of Gambler's Help Services

Bernie Durkin
Gambler's Help Eastern

Shirley Gill
Healthlink Turning Point

Chris Klitzing
Goulburn Valley Community Health Services

Lynda Memery
Gambler's Help (City)

Bronwyn Moore
Gambler's Help Laddon

Julie Nelson
Gambler's Help Northern

Kathy Ryan
Bethany Community Support

Namita Trensky
Grampians Gambler's Help
Relationships Australia

Break Even counsellors, Adelaide, November 2004

Lola Aviles
Project Officer
P.E.A.C.E. Project
Relationships Australia

Andrea Brebner
UnitingCare Wesley, Bowden

Mark Henley
UnitingCare Wesley, Adelaide

Christine Nancarrow
UnitingCare Wesley, Adelaide University, Australia

Jane Oakes
Flinders Medical Centre, Bedford Park

Garry Raymond
Break Even, Salvation Army

Multicultural focus group for service providers and counsellors for CALD communities, Adelaide, November 2004

Vivien Hope
Multicultural Communities Council of South Australia

Enaam Oudih
Manager, P.E.A.C.E. Multicultural Services
Relationships Australia

Saury Ouk
Cambodian Association Inc.

Tarik Skalea
Bosnia and Herzegovina Muslim Society of SA

Velda Tsoutas
P.E.A.C.E. Project
Gambling Community Educator
Greek Community

Nga Vu
Vietnamese Community in SA