Chapter 1
Problem Gambling Treatment Background

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Problem gambling (PG) is a significant public health concern (Gainsbury et al. 2013), and with greater opportunities to gamble provided by the relaxation of legislation regulating gambling in some countries over the last 25 years (Productivity Commission 2010), gambling behaviour is likely to at least remain at current levels in the near term. Gambling behaviour varies across populations and countries, with the estimated prevalence of the broadly defined and variously described 'problematic' or 'problem gambling' (PG) ranging from 0.15% in Norway to 5.3% in Hong Kong. PG prevalence rates of 2.1–3.1% (Hodgins et al. 2011) and 1.9–3.1% (Productivity Commission 2010) have been reported in the United States and Australia, respectively.

Disordered gambling is a recognised mental health condition that involves difficulty limiting gambling expenditure, lying about gambling and chasing losses (American Psychiatric Association [APA] 2013). Some of the consequences of PG are significant financial and psychological harm (Battersby and Tolchard 1996), with those engaging in PG also experiencing depression, self-harm, anxiety and engagement in other behaviours that compromise their well-being (Rodda and Cowie 2005; Delfabbro and LeCouteur 2009). PG has also been connected to poor employment outcomes, including taking time off and/or giving up work to gamble, job losses due to gambling or workplace criminal activities to fund gambling (Delfabbro and LeCouteur 2009).

The disproportionate negative effect that PG can have on vulnerable groups in communities is evidenced in estimates that PGs account for around 40% of the total gaming machine losses in Australia which is the predominant form of PG

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(Productivity Commission 2010). The harm outlined above is possibly an understatement, as each individual engaged in PG can create physical, social and economic problems in 5–10 other individuals (Productivity Commission 1999).

As indicated above, considered examinations of PGs have reported extensive damage. Despite this severity PG treatment is based upon an outcome literature containing important methodological limitations (Ladouceur et al. 2003; National Centre for Education and Training on Addiction 2000; Toneatto and Ladouceur 2003). A number of these limitations can be attributed to the use of a broad range of terms to define PG, no unifying theory of how and why PG develops, the assumption that PGs are a homogeneous group in the treatment literature and a dearth of well-designed randomised controlled trials (RCTs) testing treatment interventions for this population.

Issues of Definition in PG Research

Terms used to describe PG include pathological, compulsive, disordered, level 2 and 3, at risk, problem, excessive, addicted and neurotic (APA 2004; Blaszczynski 2005; Blaszczynski and Nower 2002; National Research Council 1999; Petry 2005; Shaffer et al. 1997). The primary focus of these definitions has been to differentiate between controlled, recreational and social gambling and behaviour that causes significant harm to the gambling individual or others (Blaszczynski and Nower 2002). Implicit in the above definitions is the notion that PG behaviour can be categorised on a continuum of gambling-related harms (PGRTC 2011).

The difficulties in conceptualising PG are reflected in the history of gambling in the various iterations of the *Diagnostic and Statistics Manual of Mental Disorders* (DSM). At the more severe end of the continuum are the clinical definitions of gambling behaviour that reside in the DSM. Within the two most recent editions of the DSM, Fourth Edition-Text Revision (IV-TR) and Fifth Edition (5) (APA 2004, 2013), the criteria that established a clinically diagnosable gambling problem moved from the 'Impulse Control Disorders - Not Elsewhere Specified' to the 'Addiction and Related Disorders' sections in DSM-V. The recent changes in the DSM suggest a preference for conceptualising substance and behavioural addictions similarly; they emphasise the experience of the individual rather than the object of their addiction, and they enhance the approach of translating effective treatments from the substance use and misuse literature to PG treatment. The title of the disorder also changed from 'pathological gambling' to 'gambling disorder' in the DSM-V.

The clinical and dichotomously determined form of PG outlined above is distinct from the more broadly defined and commonly used term 'problem gambling'. The latter term incorporates the less severe end of the PG continuum. PG includes both clinical and subclinical gamblers, with the most broadly accepted definition in

Australia (PGRTC 2011) being provided by the Canadian Problem Gambling Index (Ferris and Wynne 2001):

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

Within this book the terms ‘problematic gambling’ (PG) and ‘problematic gamblers’ (PGs) are used to describe the full continuum of PG as defined above. ‘Gambling disorder’ and ‘pathological gambling’ are used to describe the clinically diagnosable DSM conditions.

The Heterogeneity of Problem Gamblers

Leading researchers have stated that the heterogeneity within the PG population is evident (Blaszczynski 1999; Petry 2005), yet published gambling treatment research has tended to assume the homogeneity of participants on at least some of the diverse characteristics. The practice of defining PGs using subjective criteria has expanded the population of potential affected individuals, resulting in increased type I errors (Blaszczynski and Nower 2002). Whilst the broader approach may assist in identifying subclinical individuals for early intervention, it confuses concepts of gambling problems and clinical gambling problems and has led to contradictory and confusing results and difficulty in defining best practice (Blaszczynski and Nower 2002).

Examples of the heterogeneity within the PG population include clinical versus subclinical presentations of PG; differing levels at which individuals experience ‘harm’, for example, money lost gambling differs according to the socio-economic status of the individual; individuals seeking treatment appear to differ from those who do not seek treatment (Nettle 2007); the presence or absence of psychological dysfunction comorbid with the individual’s PG, such as a mood disorder or attention deficit hyperactivity disorder (Petry 2005); individuals who meet the criteria for gambling disorder or pathological gambling have reported using a variety of forms of gambling in isolation or in combination, such as electronic gaming machines (EGMs), track betting and the more recently available sports betting; and the methods used by PGs to place bets can vary, for example, online versus in person at venues.

The subtyping models that have been recently developed for PGs vary on the constructs and techniques used to organise the participants studied. Some examples of the subtyping models include the pathways model which clustered PGs using theoretical pathways followed during the development of a gambling problem (Blaszczynski and Nower 2002), whilst another model clustered individuals using the degree of psychopathology expressed (Álvarez-Moya et al. 2010), and yet another used personality profiles (Vachon and Bagby 2009). The primary motivation for the establishment of agreed subtypes of PGs is that targeted treatments for the

different subtypes of PGs are believed to improve treatment outcomes (Blaszczynski and Nower 2002; Milosevic and Ledgerwood 2010; Álvarez-Moya et al. 2010; Vachon and Bagby 2009; and Ledgerwood and Petry 2006).

Models of PG

People are motivated to gamble recreationally by the desire for arousal and excitement and relief from stress and negative mood (Rickwood et al. 2010). Knowledge of the factors that affect gambling participation across the lifespan is quite limited. There is also no widely accepted causal explanation or single theoretical model that adequately accounts for the aetiology of PG (Rickwood et al. 2010). Learning theory, cognitive models and neurophysiological models all have some evidence base. Very little evidence supports personality or psychoanalytic explanations (Rickwood et al. 2010). Integrated models comprising bio-psychosocial and pathways approaches are supported by emerging evidence, consistent with the aetiology of other psychological and substance misuse disorders.

Examples of models that have been developed to describe PG are the pathways model, (Blaszczynski and Nower 2002) and cognitive behavioural approaches (Sharpe and Tarrier 1993; Sharpe 2002; Raylu and Oei 2010). The pathways model sets out at least three primary subgroups of gamblers: behaviourally conditioned, emotionally vulnerable and biologically based impulsive pathways into PG. The CBT model for PG is consistent with those of other psychological disorders, where genes and environment of the individual, personality traits, the occurrence of irrational and negative cognitions, negative psychological states and sociological factors (Raylu and Oei 2010) are all relevant.

Brief Summary of Treatment Outcomes for Problem Gamblers

Treatment of PG has tended to focus at the public health and/or clinical level. A community and public health perspective of PG supports a harm minimisation approach (Dickerson 2003). Although hampered by the lack of an operational definition of harm, this approach focusses on risk and protective factors to prevent and reduce gambling harm. Primary prevention approaches have generally relied on educational campaigns to increase knowledge, although these are yet to be demonstrated empirically to be effective in achieving subsequent behaviour change. Secondary prevention approaches address individuals at higher risk and comprise policy initiatives, such as gambling venue staff training, and modifications to gambling environments and restricting access to cash.

Clinical research and individual treatment for PG, which is the focus of this book, face a number of challenges such as the impact of monetary incentives to

participate, difficulty in subject recruitment, treatment ambivalence, the role of natural recovery, the impact of intractable financial pressures and the specification of adequate process and outcome measures (Toneatto 2005). Further difficulties in ameliorating the impacts of disordered gambling arise as less than 10% of PGs seek formal treatment (Cunningham 2005; Slutske 2006), and treatment dropout rates are in the vicinity of 50% (Melville et al. 2007; Ladouceur et al. 2001). Consequently, there is a clear need for the examination of effective assessment, screening, improved treatment continuation, reducing treatment barriers as well as improving the effectiveness and breadth of treatment therapies for PGs based upon well-designed research.

To date, the treatment for PG has included pharmacotherapy and psychological approaches. We have provided chapters on both of these approaches, with an emphasis on the latter. The psychological approaches reported in the treatment literature include psychoanalytic/psychodynamic therapy, '12-step' gamblers anonymous programmes, cognitive behavioural therapy (CBT), motivational interviewing, self-help manuals and combined or dismantled versions of the preceding types of therapy (PGRTC 2011). Mindfulness-based interventions have begun to be examined recently also (McIntosh et al. 2016).

In line with the improvements needed in treating PG outlined above, a recent systematic review described the current evidence base supporting the assessment, screening and treatment therapies for PGs as 'immature' (PGRTC 2011). At present, the psychological treatments reported to be used for PG have varying levels of evidence (PGRTC). CBT is currently deemed to be the most effective treatment for PG, although CBT only received a 'cautious' recommendation for use with PGs from the PGRTC review. The effectiveness of the predominant contemporary interventions, including those that are gaining clinician support but not yet research endorsement for PG, is the focus of this book.

Transdiagnostic Conceptualisation of PG Treatment

A transdiagnostic conceptualisation promotes the development of unified treatment protocols that emphasise commonalities across a range of disorders, rather than identifying differences between disorders and encouraging specialisation of different treatment modalities (Mcevoy and Nathan 2007). One advantage of this approach is that the impact of the respective treatments on the underlying processes maintaining the dysfunction prior to treatment can be examined, and an initial transdiagnostic conceptualisation of treatment for PG may be applicable. An advantage of conceptualising an effective treatment from a transdiagnostic perspective is that the transdiagnostic treatment format is particularly conducive to dissemination into service provision settings and has the potential to treat comorbidities in an effective way without compromising the primary treatment targets. The transdiagnostic approach may introduce flexibility into manualised treatments, offer greater allowance for heterogeneous clinical presentations and provide a balance between

flexibility and fidelity that maximises both (McHugh et al. 2009). Although transdiagnostic interventions have not been applied to PG samples in research that has been reported to date, they do appear to offer benefits that would justify further investigation.

Defining the Problems Addressed in Book

The International Gambling Think Tank (IGTT) consists of the world's leading scientists in gambling and addiction from the United States, Canada, the European Union, the UK, the Nordic countries, Asia, Australia and New Zealand. The IGTT endorsed the publication of the systematic review by the PGRTC (2011), which outlined the state of knowledge concerning the screening, assessment and treatment practices of PG. Of concern, the review was only able to identify a few 'evidenced-based recommendations' to guide the treatment of PGs due to the paucity of findings meeting the PGRTC's criteria in the literature.

To address the above concern, the PGRTC (2011) provided a number of recommendations for further research in this area. The recommendations included conducting randomised controlled trials (RCTs) into the effectiveness of CBT and psychological interventions other than CBT and comparing outcomes between treatments. The PGRTC also recommended that future research into treatment efficacy should account for heterogeneity within the PG population and that gambling behaviour and severity, psychological distress, alcohol and substance misuse and quality of life measures be used wherever possible to increase the validity of research and improve treatment guidance.

There are a number of other factors surrounding PG and its treatment that make this such a fertile area within which to advance the discussion of contemporary treatment options. Some examples include the various training backgrounds of clinicians practising in this area, funding of treatment services and the fidelity of the delivery of the interventions. Funding models for PG treatment range from government-provided free services subsidised via taxes on certain operators in the gambling industry, for example, casinos in Australia, to full private funding by the PG, possibly including rebates via government health systems. In Australia this has meant that clinicians' backgrounds can range from counselling to clinical psychologists to psychiatrists reducing the consistency of the way treatment is conceptualised, operationalised and reported. Whilst diversity of the clinicians' backgrounds can be a strength for treatment development for the PG population, it can mean that 'eclectic' treatments are delivered and that research and development can be compromised if outcomes remain anecdotal or methodologies are not clearly articulated when results are shared.

This book seeks to contribute to the discussion of contemporary treatments of PG by examining CBT and alternative treatments for PG to address the 'immature' status of the treatment literature for this population. With less than 10% of PGs seeking formal treatment (Cunningham 2005; Slutske 2006) and treatment dropout

rates in the vicinity of 50% (Melville et al. 2007; Ladouceur et al. 2001), alternative treatments that may improve these statistics are warranted. The overarching aim of this book is to promote the focus on evidenced-based interventions for clinicians treating PG, to provide insight into the gaps in the research literature for PGs and ultimately to improve treatment outcomes.

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