Running Head: TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS

Targeting Problem Gambling Relapse Risk Factors: Lack of Social Connectedness and

Leisure Substitution

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Abstract

This research added an innovative, critical component to the current problem gambling treatment approaches available in Australia. It targeted a susceptible and significant group of people who experience gambling-related harm but find it difficult to stop gambling and not to start again. Relapse in problem gambling and treatment dropout is common, with a rate of up to 70% being generally accepted. To date, gambling interventions specifically targeting risk factors for relapse have not been the focus of many studies.

The author of this thesis, who has lived experience with problem gambling, designed a structured group program targeting two identified risk factors for gambling relapse: 1) lack of social connectedness, and 2) lack of leisure substitution. Between 2009 and 2016, four versions of this program were trialled. All program participants were supported by a group of volunteers, most of whom had lived experience with problem gambling and were participants in previous program versions.

Four versions of the program were evaluated using a multi-method approach. Quantitative data were collected using validated psychosocial measures. Journaled observation by the author, anecdotal evidence and journaled participants quotes were documented by the author in various project reports and are used in this thesis to support the qualitative findings.

The results of the quantitative data revealed significant improvement for participants in the areas of social connectedness, self-efficacy, and mental health. Importantly, the results also indicated that the program supported the goals of either abstinence from, or control over, gambling behaviour for program completers. It is concluded that this innovative program helped to reconnect people to activities other than gambling and to a supportive community and, in so doing, effectively achieved the research objectives. An extra qualitative study 'Volunteer study' was conducted to explore if the aspect of 'volunteering' made a positive contribution to sustain behavioural changes that were achieved by previous program participation. This exploratory study utilised 14 in-depth semistructured interviews with current volunteers of the trialled relapse-focused programs from studies 1-4. This part of the research indicated that volunteering for any of the peer support relapse focused programs provided significant benefits to an individual's recovery from problem gambling. The sample was a small convenience sample, so it is not possible to generalise the findings but offers an opportunity to further explore the importance of volunteering in recovery.

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Doctor of Philosophy Declaration

TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS

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Doctor of Philosophy Declaration

"I, Gabriele Byrne, declare that the PhD thesis entitled 'Targeting Problem Gambling Relapse Risk Factors: Lack of Social Connectedness and Leisure Substitution' is not more than 80,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work."

Signature

26-4-19

Date

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CHAPTER I

Introduction

Over the last three decades, problem gambling in Australia has been recognised as a serious and complex issue by clinicians, researchers, and policy makers. In part, this was due to an unprecedented expansion of gambling. This expansion of may be explained by the introduction of Electronic Gaming Machines (EGMs) into states other than New South Wales (NSW), which in 1956 had introduced poker machines, the forerunners of EGMs. EGMs are available in hotels, clubs, and casinos, except in Western Australia (WA) where they are only available in casinos. According to the Australian Gaming Machine Manufacturer Association (Ziolkowski, 2014), Australia has 2.4% of the world's gaming machines. However, its share of the world's high-intensity machines is larger, with the Australian Government's own Productivity Commission estimating in 1999 that the share was about 20% (Productivity Commission, 1999).

This increase in accessibility of gambling on top of continuous sophistication of the EGM operating technology also saw an increase in harm experienced by people using this product. These changes have created a profitable, powerful industry, as well as creating a significant source of revenue for governments. The 34th edition of Australian Gambling Statistics (AGS) reported the total gambling expenditure in Australia was \$23.7 billion. In the state of Victoria alone, for example, \$2.6 billion was lost on EGMs, contributing approximately \$977 million¹ in taxes to state revenue in 2016-2017 (Queensland Government Statistician's Office, Queensland Treasury, Australian Gambling Statistics, 34th edition).

Some of this taxation revenue is spent on providing treatment options to minimise gambling related harm, with most of these treatment services heavily focused on individual

¹ Includes taxes on Keno.

psychological treatment. The service delivery system in Victoria is arguably the most comprehensive in Australia and has worked well for over two decades (Jackson, Thomas, Holt, & Thomason, 2005). There have been both systemic and partial reconfigurations of the service delivery model in the last decade, adding to the depth and range of gambling counselling and educational services provided for Victorians.

To explain gambling behaviour, these services draw on biological, personality, sociological, and environmental theories as pathways (Blaszczynski & Nower, 2002). These theories will be discussed later in this thesis. Most, however, have focused on limited aspects of gambling pathways. This has subsequently led to the development of various monotherapeutic interventions. Even though those psychological and pharmacological interventions have proved to be effective for some, it is difficult to find a 'one-size-fits-all' recommendation for the treatment of problem gambling. Rather, it is better to continue to develop a client-centred approach where the client's needs are the focus of the treatment and not the 'models and methods of the helper' (Egan, 2013). The complexity of the issue warrants the development of more multimodal treatment programs and an increase in research attempting to address the need of the individuals (Blaszczynski, 2001). Nevertheless, with the focus being predominantly on the development of better treatment options, relapse has attracted little attention from clinicians and researchers.

Relapse in problem gambling and treatment dropout is common, with a rate of up to 70% being generally accepted (Hodgins & el-Guebaly, 2004). The literature has recognised various risk factors which make people vulnerable to relapse. 'Social isolation' and the need for 'leisure substitution' are amongst those risk factors. The research presented in this thesis has focused on addressing those two identified risk factors, namely: 1) the need to find meaningful recreational alternatives to gambling; and 2) the need to find support and social connections in a non-judgemental community.

To address these two specific risk factors for relapse, the author developed a treatment program, of which four versions were trialled and evaluated over a seven-year period (2009-2016). This program aimed to engage people in structured recreational and educational activities, other than gambling, and to foster social connections. Hence, this research aimed to explore whether this program improved participants' chances of recovery and/or reduced their vulnerability to relapse. All program participants were supported by a group of volunteers, who were in fact participants in previous program versions (except, obviously, for the first version).

All four versions of the program were evaluated using a multi-method approach (comprising quantitative and qualitative data analysis). Quantitative data was collected by administering pre- and post-questionnaires using validated psycho-social tools. The pre- and post-data collection, as well as the selection of validated psychosocial measures, proved to be challenging, as participants entered the program at different times, dropped out before program completion, and/or were unable or unwilling to complete questionnaires. It was therefore important to use qualitative measures to strengthen the evidence provided by the quantitative data. Participants' experiences, perceptions, and beliefs about the effectiveness of the program were captured and some of those documented in participants artwork and/or journal entries are attached and referred to throughout Chapter VI.

During the trials of the different program versions, the author observed that volunteers of all the programs seemed to grow in self-confidence and ability to maintain their recovery goals. To find out if this observation could be substantiated with evidence, the author conducted a qualitative study. This study aimed to determine the impact of volunteering on volunteers' own recovery from gambling and to explore what motivated some people to volunteer in subsequent program versions and not others. This exploration resulted in the development of a conceptual model tracking the motivation for, and the change in, the volunteers' willingness to participate in the programs.

Background

The author's lived experience of problem gambling motivated her to pursue a career in helping others and contributed to the design, development, and execution of the program researched in this thesis. The following section will include her story, a description of the rationale for this research, and a brief description of the five studies (four programs and volunteer study).

The author's life as a responsible mother, wife, colleague, and friend was irrevocably changed within five weeks of feeding the first coin into a poker machine (also referred to as an EGM, slot machine, or Video Lottery Terminal, VLT). It was to set her on a four-year destructive 'love affair' with gambling that came dangerously close to tearing apart everything and everyone that she cared about. It took four years of trying to escape the emotional roller coaster of cycling through therapy and relapse until she eventually regained control over her gambling and life.

Through the many forms of therapeutic interventions that she tried, such as Gamblers Anonymous (GA), Cognitive Behavioural Therapy (CBT), Medication Therapy, and Neuro Linguistic Programming (NLP), she was able to put together a kit of strategies that worked for her. Once she stopped gambling, the author self-published a book of these strategies called the *Free Yourself Program (FYP)*.

The *FYP* was a clear and simple self-help guidebook that taught hands-on strategies for escaping the 'gambling trap'. The book, framed within an addictions model, was designed to be a positive, holistic, proactive, and theoretically-sound approach to help people to deal with their problematic gambling. It was based on the strategies that helped her to control the urge to gamble and that, over time, had helped her to regain control. These strategies gave the responsibility back to the person directly affected by gambling to work on changing their attitudes and behaviours. The book was self-published in 1997 and is currently in its 5th edition, having sold more than 10,000 copies (a large number in the Australian context).

Teaching these strategies to others was rewarding, but not everybody stopped gambling, and many of those using the book relapsed. One of the recurring arguments that the author heard from people buying the book and practicing the strategies was: "We have nowhere else to go". This feedback started her interest in learning more about the way that gambling venues were used in people's lives and the importance of gambling venues as arenas of social life. She wanted to find out how this fitted into the overall addiction cycle. This crystallised her realisation that people challenging their problematic gambling behaviour needed more than just therapy.

In 2001, the author founded a not-for-profit organisation called Chrysalis Insight Inc., which she chaired as the CEO between 2012 and 2016. Chrysalis Insight Inc. was committed to rebuilding and connecting community to lessen the destructive effects of problem gambling. The approach rests on the assumption that the provision of safe, recreational places and alternative activities to poker machine gambling will make a difference to those who are in crisis due to gambling and social isolation. The long-term mission of Chrysalis Insight Inc. was to rebuild communities through the provision of people-friendly 'Third Places' (or 'Great Good Places') as alternatives to gambling venues. The Third Place term and concept was first established by the sociologist Ray Oldenburg, who said: "Third Places, or great good places are the many public places where people can gather, put aside the concerns of home and work (their first and second places), and hang out simply for the pleasures of good company and lively conversation. They are the heart of the community's social vitality and the grassroots of the democracy" (Oldenburg, 1993 Synopsis). Third Places connect individuals, increase social connectedness and (re)build strong, healthy, vibrant, and interactive communities. These places can be cafés, hotels, neighbourhood houses, in fact, any venue where people can congregate. Establishing Third Places involves marketing them to the community as welcoming, safe, and engaging environments that encourage social interaction, support, and communication between people, and are inclusive and tolerant spaces.

From 2001-2005, Chrysalis Insight Inc. established a first Third Place under the author's leadership by running a Social Enterprise called The Chapel Restaurant, where the author facilitated the FYP. The Chapel Restaurant, located in the heart of Lilydale (an outer suburb of Melbourne, Victoria), aimed to provide the local community with a recreational alternative to the many gambling venues in the area. During this time, Chrysalis Insight Inc. worked with up to 90 volunteers, many of whom were directly or indirectly affected by problem gambling. This provision of a Third Place saw many lives positively changed as a consequence of the feeling of belonging to a community. The author witnessed that recovery from problematic gambling was sped up by the involvement in a real community-building project. She also noticed that many of the problem gamblers involved in volunteering recovered quicker. Many of these volunteers commented that working alongside other volunteers, some of them with no experience of problem gambling, increased their confidence to engage in other activities at a faster rate and reduced their vulnerability to gambling relapse (Jackson et al., 2005). This project was strongly supported by the patron of the organisation, World Vision CEO, Tim Costello, who actively participated in many fundraising events.

In 2004, Chrysalis Insight Inc., in partnership with Swinburne University, Shire of Yarra Ranges, Gambler's Help Eastern, Rivendell (Eastern Area Community Health), and Know the Odds, conducted a research project at The Chapel Restaurant to test a model of engagement and information dissemination relating to problem gambling. The report (Swinburne University, 2004) recommended that the Third Place concept should be further explored and expanded. In 2005, however, the restaurant was sold when the lease came to an end and, with the sale, the problem gambling project run at that venue also ended.

The author was left with the question of how to use what she had observed and learned during her time at the restaurant to develop a program that offered support in recovery but, if successful, would be able to be replicated. In 2009, the Victorian Labor Government announced an innovations grant scheme which was made available to all Gambler's Help services. Fortunately, the author secured a grant under this scheme, which offered an opportunity to investigate further the answer to her questions.

Rationale for this Research

The rationale for this research was based on a 2003 review for the Victorian Government's Gambling Research Panel (GRP) of best practice in problem gambling services (Thomas, Jackson, & Blaszczynski, 2003) and a client-centred review of treatment services, including the *FYP* program (Jackson et al., 2005). The *FYP* program offered a form of quasi-professional group intervention led by a peer facilitator involving support volunteers which could be offered as a stand-alone self-help intervention or as an adjunct to professional counselling (Ferentzy & Skinner, 2003; Ferentzy, Skinner, & Antze, 2006; Petry, 2004; Petry, 2005a). This group intervention program identified and addressed two known risk-factors for gambling relapse once a person had stopped gambling, namely lack of social connectedness and leisure substitution (Dowling, Jackson, & Thomas, 2008). The review of the initial *FYP* program by Jackson and Thomas (2005) recommended that further research be conducted to investigate if a group treatment program, supported by volunteers, which addressed a lack of social connectedness and leisure substitution could potentially reduce problem gambling relapse.

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This recommendation resulted in the next generation development of the program which formed the basis for this thesis. The next generation program was developed, trialled, and evaluated in four different studies, namely: (1) Study 1, (Re)Making Meaning (2010-2011), i.e. the Re-Making Meaning approach to leisure substitution (Jackson, Francis, Byrne, & Christensen, 2012); (2) Study 2, MoreConnect1 (2012-2013); (3) Study 3, MoreConnect2 (2013-2014); and (4) Study 4, Dare To Connect north west (2014-2015).

Study 5, the Volunteer Study, was not initially planned or identified as a key component when the author applied for candidature. This unplanned study was the result of her observing the positive impact that volunteering had on people's recovery. This study aimed to add further evidence to the treatment program's effectiveness for addressing gambling relapse. This qualitative study followed a number of participants who, after they completed the program as participants, decided to continue their involvement in the program as volunteers to support the new participants. This part of the research tried to establish what impact, if any, the volunteering component added to the recovery of the people who took part in the study. It also sought to explore what motivated some of the participants to volunteer while others did not consider volunteering as an option.

The evaluation of the first trial of the program (Re)Making Meaning (RMM), conducted by the Problem Gambling Research and Treatment Centre at the University of Melbourne, led to the recommendation to roll out the program as a part of a general problem gambling treatment service provision in Victoria. This program roll out has been documented in a report issued after the completion of Study 1 (Jackson & Problem Gambling Research and Treatment Centre, 2011). In addition, the results of this first study (RMM) were subsequently published in the *International Journal of Mental Health and Addiction* (Jackson et al., 2012). With a change of government and an administrative shift for problem gambling treatment services (from the Victorian Department of Justice to the newly-established Victorian Responsible Gambling Foundation), all new funding and refunding of problem gambling projects was put on hold.

However, in 2011, Chrysalis Insight Inc. won a tender to run the Moreland City Council's MoreConnect1 (MC1) program, which was the first local government initiative in Australia to introduce a social connection program for problem gamblers on any significant scale. MC1 was financed through the introduction of a differential land tax rate for commercial gambling venues in Moreland. Moreland City Council used all revenue raised by this rate for problem gambling prevention programs, including MC1.

MC1 (Study 2) built on the successful pilot of the program funded by the Victorian Department of Justice in 2010. The MC1 program was a version of the pilot program RMM, focusing on building social confidence and increasing social connectedness. This version of the program differed from the pilot program in that it was run over a six-month period rather than the twelve-month period in the RMM. Both versions of the program included regular social activities, entertainment and educational/empowerment sessions. The author managed the facilitation of the MC1 program and the data collection procedures required for an analysis of its effectiveness in addressing the two identified gambling relapse factors. This analysis was conducted by the Problem Gambling Research and Treatment Centre at the University of Melbourne at the completion of the study. The data was analysed again in this thesis during the final evaluation of all program versions.

Study 3, the MoreConnect2 (MC2) project, followed in February 2013 and also ran for six months. This version of the program differed from the RMM and MC1 versions as it was facilitated by a project worker under the supervision of the author, the latter was responsible for supervising the collection and evaluation of pre- and post-data.

The MC1 and MC2 programs demonstrated further positive outcomes by being based in a local government setting. They increased social capital in the local community and promoted existing non-gambling local businesses, as well as providing low- and no-cost entertainment and recreation options for all participants through in-kind offers of local businesses and not-for-profit organisations.

In 2014, the Victorian Responsible Gambling Foundation (VRGF) offered funding for organisations in support of projects focussing on preventative measures to address harm caused by gambling. The VRGF's prevention grant selection criteria clearly stated that all funded projects needed to focus on preventing harm from gambling, including preventing relapse. Chrysalis Insight Inc.'s submission was successful, and funding was received to trial the social connection program called *Dare To Connect North West* (DTCNW).

For this project (Study 4), the fourth version of the original program, Chrysalis Insight Inc. partnered with five local governments in Melbourne, Australia (i.e., Moreland, Hume, Maribyrnong, Brimbank, and Mooney Valley), two Gambler's Help Services (i.e., north and city), North West Mental Health Service, and Lentara Uniting Care. The program length was shortened to between ten and 12 weeks, and the program was repeated six times over in a 15month period. Like the previous versions of the program (i.e., RMM, MC1, and MC2), data was collected pre-and post-program.

Aims and Research Questions

This research aimed to:

 Evaluate the effectiveness of an innovative model addressing two identified risk factors for relapse (lack of social connections and lack of leisure substitution²). This model specifically targeted the maintenance phase of the 'stages of change model' (Prochaska & DiClemente, 1983) in relation to drug and alcohol recovery, which is discussed further in Chapter V.

² As per the preceding section, applications of this model have had different program names: 2010 '(Re)Making Meaning'; 2012 'MoreConnect1'; 2014 'MoreConnect2'; and 2015 'Dare To Connect north west'.

- 2. Attempt to discern if there is a relationship between this theory-driven program and any actual reduction in problem gambling behaviour.
- Investigate if this program also contributed to changes in participants' overall wellbeing, for example the reduction of social isolation, improved social connectedness and better mental health.

While being actively involved in the management of the programs, the author observed that many of participants who opted to stay on for the next program as volunteers seemed to continue to develop further interpersonal skills and becoming more confident in maintaining their recovery goal. To see if this observation was correct, she sourced extra funding and conducted Study 5.

Study 5 involved the design, implementation, and analysis of 14 in-depth interviews with volunteers supporting the program, with the aim of determining: 1) what factors motivated people to volunteer, or not, in subsequent versions of the program; and 2) how volunteering for this program affected their own recovery from problem gambling?

In the larger field of gambling research, this thesis aimed to fill gaps at three levels:

- In the understanding of relapse risk, with the intention of considering and testing how leisure substitution and social connectedness are essential ingredients for maintaining the behavioural change addressed in other therapeutic interventions for problematic gambling behaviour.
- 2. In current problem gambling treatment practices, with the intention of determining if the findings were significant enough to consider incorporating a specific relapsetargeted model into all mainstream problem gambling treatment services.
- 3. In the planning of future treatment programs, so as to incorporate a focus on targeting gambling relapse, for example, by targeting known risk factors for relapse.

Thesis Outline

Chapter II, entitled 'Setting the Scene', provides a literature review to explain the gambling environment in which this study took place. This chapter describes the history and the regulatory framework of gambling in Australia, as well as describing the various gambling products available in Australia. It also explains the regulatory framework of gambling in Victoria, a state of Australia in which the author conducted the research. As the Productivity Commission (2010, p. 10) explained, most gambling related harms occur because of EGMs, and "the risks associated with playing gaming machines are higher than other gambling forms". Most of the participants of the research were EGM players. Therefore this chapter also includes a section about EGMs.

Chapter III, entitled 'Gambling and Gambling Related Harm', provides a summary of the various definitions of harm caused by problem gambling and reviews the association between gambling and harm. It explains some of the identified risk factors and the screening and assessment tools commonly used to assess gambling related harm, and it provides an overview of current psychological theories, which are used to understand problem gambling.

Chapter IV, entitled 'Problem Gambling Interventions', summarises gambling interventions available in Australia, including: (1) primary interventions, which aim to prevent problem gambling; (2) secondary interventions, which aim to minimise the harm caused to those who already have developed gambling problems; and (3) tertiary interventions, which aim to support people who are either directly or indirectly harmed by gambling. This chapter concludes with a summary on relapse and the identified risk factors that are the focus of this thesis, namely, lack of social connectedness and leisure substitution.

Chapter V, entitled 'Framework Development for a Relapse-Focused Model', outlines the evaluation methodology and program design, the key concepts of the program, and the value assigned to the program activities. It outlines the program features and the implementation and evaluation plan. It describes a 'stage of change' model (Prochaska & DiClemente 1983) which provided the framework for the development of the program discussed in this thesis. It explains the evaluation plan, the methodology and includes a detailed list of all of the validated psychological measures used for the evaluation of the program.

Chapter VI entitled 'Research Results', entails a detailed description of each version of the program including the individual program activities and the quantitative and qualitative findings.

Chapter VII, entitled 'Volunteer Study', presents the findings of an exploratory study examining whether the act of volunteering for the relapse-focused program supported their own recovery from gambling related harm. It includes the analysis of 14 in-depth semistructured interviews conducted with the volunteers. It explains how the findings resulted in the development of a 'volunteer motivation conceptual model', summarising the various motivating factors that drove recovering problem gamblers to volunteer.

Chapter VIII 'Discussion, Conclusions, and Applications' summarises the key findings of the research and interprets these in relation to the research aims and questions. The findings are linked to the relevant research. It also explains the limitations and challenges of the research component as well as noting the strengths and limitations of the study overall. It completes by looking at how the learnings from the integrated relapse-focussed model findings could have implications for future research, treatment, and policy.

CHAPTER II

Setting the Scene

The aim of this chapter is to describe the gambling landscape in Australia and, more specifically, in the State of Victoria. This will provide the context of the gambling environment at the time this research occurred. The literature cited in this chapter focuses on key concepts relevant for the research presented, as well as describing the political and regulatory framework present at the time the research took place.

This introductory section is followed by a brief description of available gambling products in Australia, with a specific focus on the characteristics of Electronic Gaming Machines (EGMs). EGMs, as they are called in Australia, have different names, such as Poker Machines, Pokies, Slot Machines, Video tellers, and electronic terminals. Since their introduction in Victoria in 1992, EGMs (or whatever else they are called) have been associated with a significant increase in gambling related harm. The increase in gambling harm is strongly linked with an increase in revenue for the gambling industry and governments. It is, therefore, important to understand the regulatory framework in which the gambling industry operates in Australia and, specifically, in Victoria, where this research was conducted.

Firstly, it is important to note that in Australia the words *gambling* and *gaming* are often used to describe the same activity. This can lead to confusion and misperceptions of what the activity involves (King & Delfabbro, 2014). The next segment briefly explains the difference between the two words so that it is clear that these two words do not mean the same thing. The gambling landscape in Australia is very different to the gaming landscape, even though they share some overlapping characteristics.

In Webster's Encyclopaedic Unabridged Dictionary of the English Language, gaming is defined as: "a competitive activity involving skill, chance, or endurance on the part of two or more persons who play according to a set of rules, usually for their own amusement or for that of spectators" (Books, 1994, p. 152). The most common types of gaming are: video games, miniature war games, and role-playing games. Video games were patented in the 1940s, but it was not until the 1980s, with the advancement of technology and the introduction of Nintendo, X-box, and PlayStation, that gaming became a major leisure pursuit. With the Internet providing a large platform for games, multi-player online games like 'World of Warcraft' have millions of people around the world subscribing to play games every day.

Gambling in the same dictionary is defined as: "to play at any game of chance for money or other stakes" (Books, 1994, p.152). Gambling includes betting money or other stakes on undefined, chance-determined outcomes. The following are games of chance available in Australia: Poker, Blackjack, Sports betting (TAB and online), Video Poker, Keno, Bingo and EGMs (Pokies in Australia). Lotteries and 'scratchies' (scratch cards) are also games of chance and operate on a large scale in Australia. The industry providing gambling products in Australia often uses the word gaming for a gambling activity, which is confusing for the consumer and the general public because it makes it easy to perceive 'gambling' as a harmless, fun activity that can be played without any negative consequences, such as financial loss.

Even though gambling and gaming are two different activities they do share some overlapping characteristics (Stanley, 2012). The five overlapping characteristics are:

(1) The introduction of gambling elements to games on social media for exampleFacebook;

(2) the cross-selling and marketing of online gambling sites or land-based venues to social gaming customers;

(3) the introduction of social gaming features to online gambling sites;

(4) the consolidation of similar games on non-monetary social gaming and online gambling sites owned by the same operator;

and (5) the 'gamblification' of non-gambling games, in which customers can win items of value. (King & Delfabbro, 2014)

Even though there is a definite overlap in characteristics and harmful consequences associated with gaming and gambling, it is important to understand the difference. Most forms of gambling are designed to make a profit, which indicates that players need to expect to lose. Depending on the game that is played, the return to player varies. For example, EGMs are set to return between 85%-92%, whereas Casino table games offer a higher return, some over 95%. The following section will discuss this in more detail and offer a brief summary of the history and the broader gambling landscape in Australia and Victoria.

The Landscape of Gambling in Australia

Gambling has been argued to be an essential feature of Australia's popular culture. It goes hand-in-hand with an increasingly influential entertainment and tourism industry which makes significant contributions to the economy and all Australian State and Commonwealth government revenues. Melbourne Cup Day for example is Australia's best-known horseracing event. Since 1861, the Melbourne Cup has been an official race day and since 1877, only in the state of Victoria has been declared a public holiday. Despite its acceptance into many aspects of Australian society and culture, gambling has also been the subject of public debate and scrutiny regarding the potential social implications its continuing proliferation may induce (McMillen et al., 1999; Productivity Commission, 1999). The view that gambling is an integral part of Australian culture is supported by the fact that Australians have a public holiday for a horserace (i.e., the Melbourne Cup) and the many clichés about Australians and their predisposition to gamble. Statements like 'Australians love to gamble', 'Australians will bet on two flies crawling up a wall', and 'Australians love a flutter', highlight the fact that gambling is normalised in Australia. This widespread acceptance of gambling has been used by State governments and the increasingly influential gambling industry to allow a significant expansion of commercial gambling products over recent decades. It has also been argued that the supposed Australian propensity to gamble is a 'myth' propagated precisely with this end in view (Costello & Millar, 2000).

It is widely acknowledged that gambling was introduced in Australia with colonisation, although there is some evidence that Indigenous Australians engaged in some forms of gambling prior to European settlement (Breen & Gainsbury, 2013). There have been four major periods shaping Australian gambling history (McMillen et al., 1999). Firstly, it began with the early period of colonisation from 1788-1900, when the arrival of the First Fleet of British ships marked the start of a new dominant society in Australia in place of the pre-existing Indigenous Australians. This was followed by a period of selective legalisation from 1900-1940s. Secondly, between the Second World War and the 1970s, Australia experienced a period of government endorsement and market growth for gambling. Thirdly, the biggest phase of commercialisation, competition, and market expansion took place from the 1970s to 1990s. Finally, the period 2000-2018 is primarily characterised as a 'mature market' with little actual expansion except for online forms of gambling.

The first casino in Australia was built in Hobart, Tasmania, in 1973, which led to the establishment of 12 more casinos around Australia. EGMs were legalised and introduced into clubs and hotels first in New South Wales (NSW) in 1956, followed by Australian Capital Territory (ACT) in 1976. By the early to mid-1990s all Australian states except Western Australia (WA), where EGMs are only available in casinos, offered them within clubs and/or hotels (Productivity Commission, 1999).

McMillen and colleagues (1999), in their review of the history and legislative developments in Australian gambling industries, clearly identify how the history of gambling in Australia has been significantly influenced by a number of key factors. These factors include shifts in social values, religious and moral beliefs, and economic instability resulting in a need for governments to increase their revenue. These factors, combined with an upsurge in political conflicts and the continuous improvement of gambling product technology, have resulted in the gambling landscape we are experiencing today (McMillen et al., 1999).

Every Australian state and territory has at least one casino and access to racing, lotteries, and EGMs (except for Western Australia, where EGMs are only available in a casino). In Australia, there are more than 1,100 gambling tables, 198,300 EGMs (97,065 in NSW), almost 6,000 venues that provide EGMs, 4,700 lottery outlets and 4,500 Totalisator Agency Board (TAB) outlets (Productivity Commission, 2010). Australians lose about \$24 billion each year on gambling, which equates to approximately \$1,250 per person, with EGMs mostly located in clubs and hotels accounting for more than 50% (Australian Gambling Statistics, 34th edition). This expenditure on gambling is significantly higher than in other countries, as reported in 2018 by the *New York Times* and in 2017 by *The Economist.*³ The former noted that:

In pockets of suburbia all across Australia, electronic gambling machines known as pokies await their many customers in pubs, hotels and sports clubs, as common a fixture as A.T.M.s in a shopping mall.

But the unremarkable machines contribute to an extraordinary level of gambling. Government statistics show that they account for more than half of individual Australians' annual gambling losses, a gargantuan 24 billion Australian dollars ... On a per-capita basis, Australians lose far and away the most in the world ... more than double those in the United

³ For historical data, see (Delfabbro, 1992).

States, and around 50 percent higher than second-placed Singapore, according to H2 Gambling Capital, an analytics company. (Baidawi, 2018)

The Economist (9 February 2017) also used H2 Gambling Capital data to create its Chart of the Day (see Figure 1 below), illustrating its point that:

To the general public, Australia hardly leaps to mind as a gambling hotbed. Yet industry insiders know it is far and away their most lucrative market: according to H2 Gambling Capital (H2G), a consultancy, betting losses per resident adult there amounted to [approx. \$A1,250] last year. That is 40% higher than Singapore, the runner-up, and around double the average in other western countries. The most popular form of gambling in Australia is on ubiquitous electronic poker machines, or "pokies", which are more prevalent there than anywhere else. Although the devices are legal in many other markets, bet sizes are usually capped at modest levels. By contrast, in Australia, which began to deregulate the industry in the 1980s, punters can lose as much as [approx. \$A1,500] an hour.

The proliferation of gambling and associated harm led to the Productivity Commission's initial inquiry into gambling in 1998, with the report published in 1999. While common in the United States and Britain, the Australian gambling industry had never faced a national government inquiry on a similar level (McMillen et al., 1999). The following Table 1 summarises the total expenditure on gambling in all Australian states.

In 2015 an estimated 39% of adults (i.e., about 6.8 million people) in Australia engaged regularly in one gambling activity per month, with the participation rate on lotteries being the highest (76%), followed by scratch tickets (22%), and EGMs (21%) (Armstrong & Carroll, 2017). More than half a million Australians (approximately 4% of the adult population) play EGMs at least once a week. Problem gamblers who regularly use EGMs are estimated to make up about 40% of the total expenditure on EGMs (Productivity Commission, 2010).



Figure 1. The Economist Chart of the Day. Reprinted from "The World's Biggest Gamblers: Australia was the first country to deregulate gambling, and it shows". (2017, Feb 7). *The Economist.*
Table 1

Total Gambling Expenditure (\$million) 2016-17

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	AUSTRALIA
Off-course bookmaker	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
On-course bookmaker	0.1	30.9	1,135.7	0.0	0.3	0.0	0.0	1.0	1,168.1
On-course totalisator	0.1	8.3	0.9	0.0	0.0	0.7	27.1	4.7	41.8
TAB	17.2	936.9	11.5	323.7	106.9	40.0	431.7	234.9	2,102.7
Total Racing	17.4	976.2	1,148.1	323.7	107.3	40.7	458.8	240.5	3,312.7
Casino	34.5	1,543.6	97.1	715.9	135.6	84.3	1,556.3	622.8	4,790.0
Machines	168.8	6,188.4	92.6	2,286.3	680.3	110.3	2,609.5	0.0	12,136.2
Instant Lottery	1.7	41.1	1.6	73.2	10.7	4.6	20.1	33.7	186.9
Interactive Gaming	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Keno	2.7	160.0	13.8	101.1	24.0	31.8	23.4	0.0	356.8
Lotteries	0.4	44.0	0.0	0.0	0.0	0.2	0.0	0.0	44.7
Lotto	16.2	423.8	40.7	336.0	108.5	33.5	478.3	327.1	1,764.1
Minor Gaming	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.4	34.4
Pools	0.0	2.1	0.1	1.2	0.3	0.1	1.2	0.7	5.8
Total Gaming	224.3	8,403.1	246.0	3,513.7	959.4	264.9	4,688.8	1,018.7	19,318.9
Bookmaker (and other) Fixed									
Odds	0.0	15.7	460.9	0.0	0.1	0.0	0.0	0.0	476.6

TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS

Bookmaker (and other) Pool									
Betting	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tab Fixed Odds	0.0	133.0	0.0	17.9	8.6	3.4	326.1	90.6	579.4
Tab Tote Odds	0.0	3.7	0.0	0.4	0.0	0.0	1.4	0.4	5.9
Total Sports Betting	0.0	152.3	460.9	18.3	8.6	3.4	327.5	91.0	1,062.0
Total All Gambling	241.8	9,531.6	1,855.0	3,855.7	1,075.3	309.0	5,475.0	1,350.2	23,693.7

Note. Adapted from Australian Gambling Statistics 1988-89 to 2016-17, 2015, 34th edition.

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Gambling participation rates differ for men and women. While men and women participate in gambling forms such as lotteries and EGMs in equal proportions, a much higher proportion of men gamble on racing, sports, and casino games (Productivity Commission, 2010). EGMs are increasingly played by women who do not wish to be associated with gambling activities that are mainly taking place in a 'male' environment. This statement refers to the factor that traditional gambling venues were considered by women to be overly masculine (Corney & Davis, 2010). Research also suggests that women have different motivations to gamble, including a desire to escape from worries and a need to relax and/or a need to escape domestic violence (Hing, Nuske, & Breen, 2017). The various motivations to gamble which can lead to harmful consequences is further investigated in Chapter III.

It is important when considering the expansion of gambling products to take into consideration the demographic variations and their associated social consequences. For example, Internet gambling, sports betting, and online betting are likely to attract younger men, whereas increasing the number of EGMs in an area will have a significant effect on the number of women gambling. In Australia, the younger generation's participation rate on all forms of gambling is higher than that of older people. The South Australian Government conducted a survey of 17,000 adults and found that 51% of people aged 18-24 had gambled on EGMs in the last 12 months, compared with 29% of 65-74 year olds (Delfabbro, King, & Griffiths, 2014).

The report 'Gambling Activity in Australia' by Armstrong and Carroll (2017) noted that approximately one third of the gambling population engaged in not just one but multiple gambling activities. It also concluded that those who gambled regularly came from wideranging sociodemographic backgrounds (Armstrong & Carroll, 2017). The more detailed information about the different social and ethnic groups is available, the more it is possible to tailor prevention, education and other programs to target those groups with the aim to reduce the number of people manifesting problems with gambling (Rickwood, Blaszczynski, Delfabbro, Dowling, & Heading, 2010). Another key aspect which was investigated in the original commissioned review of the gambling industry in Australia (Productivity Commission, 1999) was to consider if there was evidence for the availability hypothesis. The report concluded that greater availability of opportunities to gamble was associated with more gambling and more problem gambling. This led to another study by Vasilliadis, Jackson, Christensen and Francis (2013) who conducted a systematic review of published work looking at physical accessibility of gambling opportunity and its relationship to problem gambling. The reviewed studies suggested that greater proximity to gambling opportunities is associated with an increased risk of problem gambling. However, this association is a complex one (Vasiliadis, Jackson, Christensen, & Francis, 2013).

Another point to make is that gamblers' winnings in Australia are not taxed (Smith, 2000). There are three main reasons for this. Firstly, Gambling is not considered a profession; it is treated as a hobby or recreational activity. Secondly, the Australian Government views gains from gambling activities not as income but as a result of good luck. Even if someone wins big, they also lose a lot in other gambling sessions. Thirdly, the government taxes gambling operators instead. Taxation of gambling operators in Australia differs by state, and different gambling services are taxed in different ways. There are taxes on the turnover, on player loss, and on net profit. As gambling operators need to obtain a license to offer their services, certain fees must also be paid at this stage of gambling business development (Smith, 2000).

In Australia, three levels of government are responsible for policy making, regulation, and the provision of help services for people affected by problematic gambling, namely the federal or commonwealth, state and territory, and local or municipal. Gambling in Australia is mostly regulated by the states and territories level of government. Even though the expansion of online gambling in Australia has led to the Federal Government taking a more active role in the regulation of gambling, most of the gambling industry in Australia is regulated by state government and, to a lesser degree, by local government authorities. The Commonwealth Interactive Gambling Act (IGA) was created in 2001 to minimise the harm caused by online gambling by limiting the provision of online gambling services to Australia. Under this Act, it is an offence to provide online games of chance and any form of advertising for such services. Table 2 shows the different forms of online gambling available in Australia and how they are regulated under this Act (Productivity Commission, 2010).

Table 2

	Online Gaming	Online Wagering	Other
Game	Poker, Roulette,	Racing,	Lotteries, Keno
types	Virtual EGMs	Sportsbetting,	
		Outcome of events	
Regulation	Prohibited by the IGA	Not prohibited by the	Not prohibited by the
body		IGA (except online	IGA (except online
		'in-play'wagering)	scratch or other instant
		Regulated by States	lotteries)
		and Territories	Regulated by States
			and Territories

Online Gambling Types in Australia

The following is a list of all of the state government organisations that are involved in Australian Gambling Regulation, along with the regions in which they have authority to make decisions:

- Australian Capital Territory (ACT) Gambling and Racing Commission
- Northern Territory (NT) Licensing Commission

- New South Wales (NSW) Office of Liquor, Gaming and Racing
- South Australia (SA) Independent Gambling Authority
- Queensland (QLD) Office of Liquor and Gaming Regulation
- Victoria (VIC) Commission for Gambling and Liquor Regulation
- Western Australia (WA) Department of Racing, Gaming, and Liquor
- Tasmania (TAS) Gaming Commission
- Australian Broadcasting Authority Manages a formal complaint process across Australia, allowing residents to register concerns involving the advertising of any interactive gambling products.

All harm minimisation and consumer protection measures are regulated by the State Governments and Territories. These include the use of mandatory, co-regulatory and selfregulatory codes of practice and/or codes of conduct (Productivity Commission, 2010). Table 3 outlines which code is implemented in the various states and territories.

Table 3

Тур		Ν	ς	Ν	А	Ι	Г	5	V
e of Code	Т	ld	SW	CT	ic	as	А	А	
Man		Σ			Х			2	
datory									
Co-			Х						
regulatory									
Self-				Х		Σ	Σ		
regulatory									

Code of Practice Implemented in States and Territories

The harm linked especially to EGM gambling led to the implementation of various measures aimed at reducing or preventing gambling related harm. It also prompted the

introduction of the term 'responsible gambling', similar to 'responsible consumption of alcohol' which is now widely used by government and industry to address gambling related harm. Under the code of conduct for the provision of gambling in several Australian states, 'responsible gambling' is a concept that makes sure that the gambling industry provides a fair and safe gambling experience for players which protect them from gambling related harm. The codes also state that gambling staff members are obliged to intervene when they identify problematic behaviour with one of their patrons (Australian Leisure and Hospitality Group, 2009; Clubs Australia, 2012a). Much of the debate around gambling, and the need to encourage responsible gambling, arises primarily from public concerns about problem gambling (Productivity Commission, 2010). Encouraging 'responsible gambling behaviour' and preventing 'irresponsible gambling behaviour' from occurring are two very separate issues that all stakeholders need to address. Government, industry, academics, help-services and consumers are focusing only on one side of the equation, naturally the one that serves their interests. There is no nationally accepted definition about what 'responsible gambling' entails. All states in Australia promote 'responsible gambling' by either providing educational material, provision of safe gaming messages and self-exclusion policies.

Table 4 outlines a selection of harm minimisation measures in States and Territories of Australia 2018 as they relate to EGMs. It is important to note that in WA EGMs are only available in the Casino (Productivity Commission, 2010).

Table 4

	NT	QLD	NSW	ACT	VIC	TAS	SA	WA	
Informed Choice									
Warning & Signage	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Education (schools)	No	Yes	Yes	Yes	Yes	No	Yes	No	
Consumer Control									
Self-exclusion	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Alcohol/Gaming Restrictions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Venue Restrictions									
Machine/Caps	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
					No ATM				
ATM/EFPOST	\$250	250	Various	\$250	EFTPOS \$500/day/ venue	NO4	\$200	N/A	
Shutdown	4-10am	Approx. 10hrs	-	3hrs	-	-	6hrs	N/A	
Winnings by chq	\$250	\$250	\$2000	\$2000	\$2000	\$1000	-	-	
Game/EGM Restri	ictions								
Autoplay	No	No	No	No	No	No	No	No	
Max Bet	\$5	\$5	\$10	\$10	\$5	\$10	\$10	\$5	
Note Acceptors	Not in Clubs/ Hotels	\$20	\$100	\$50	\$50	Not in Clubs/ Hotels	No	N/A	
Staff-Training	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Summary of a Selection of Harm Minimisation Measures in Australia

The ways in which industry compliance with the measures listed in Table 4 is monitored and enforced varies significantly between states and territories (Breen, Buultjens, & Hing, 2006; McMillen & Pitt, 2005).

The research presented in this thesis took place in Victoria, therefore it is important to summarise the specifics of the gambling environment in Victoria.

The Landscape of Gambling in Victoria

In Victoria, the conduct of gambling is governed by various legislation. The Gambling Regulation Act (The Gambling Act, 2003) regulates how gambling activities are conducted in Victoria. This covers all forms of gambling except the Casino. The core objective of this act is to minimise the harm caused by gambling and to provide a safe environment for those who want to gamble. The Casino is legislated through the Casino Control Act (1991).

In 2001, the Victorian Government passed legislation and established the Victorian Commission for Gambling and Liquor Regulation (VCGLR) to oversee the conduct of gambling in Victoria by granting or refusing applications for a gambling license. This new Commission started work in February 2012. Its role is to apply the Gambling Regulation Act 2003 and the Liquor Control Reform Act 1998 and all other Acts, which guide Commission decisions. The responsibilities of the Commission are also to implement Government policy, to inform the minister in relation to the Commission's functions and the operation of gambling and liquor legislation. It undertakes licensing, approval, authorisation, and registration activities under the Act and responds to complaints in regards to breaching the Act. It investigates and applies penalties in line with the Act if there is non-compliance. The VCGLR also approved the VCGLR directions and guidelines with which all gambling licensees and equipment manufacturers must adhere.

The Planning and Environment Act (The Planning Act, 1987) is responsible for the proper use of land in Victoria. Under this act the development and building of gambling

venues takes into consideration the social and economic impact this might have on the communities surrounding the area. The Local Government Act (1989) ensures that local government areas (LGAs') provide the best living conditions for their local community.

A 2014 prevalence study in Victoria found that 70.1% of the adult population participates in some form of gambling at least once a year, with only 29.9% not gambling on anything, including buying lottery tickets and/or betting on the Melbourne Cup (Hare, 2015). Gambling expenditure grew from a negligible amount to about 0.5% of household disposable income in the late 1970s. This rate remained steady until the early 1990s before rising dramatically with the introduction of both EGMs and casino gambling (McMillen et al., 1999). See also the Victorian data italicised in Table 1 and the corresponding per capita data in the following Table 5.

Table 5

Total Gambling Expenditure per capita 2016-17

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	AUSTRALIA
Off-course bookmaker	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.01
On-course bookmaker	0.27	5.09	6,202.39	0.00	0.23	0.12	0.00	0.50	61.69
On-course totalisator	0.34	1.38	4.91	0.00	0.00	1.68	5.55	2.36	2.21
TAB	54.48	154.44	62.80	86.47	79.01	98.41	88.39	118.72	111.06
Total Racing	55.09	160.91	6,270.11	86.47	79.31	100.21	93.94	121.59	174.96
Casino	109.03	254.43	530.41	191.25	100.22	207.50	318.67	314.85	252.99
Gaming Machines	533.62	1,020.06	505.96	610.79	502.93	271.43	534.34	0.00	640.98
Instant Lottery	5.41	6.78	8.95	19.57	7.92	11.41	4.12	17.06	9.87
Interactive Gaming	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Keno	8.55	26.38	75.11	27.02	17.76	78.17	4.78	0.00	18.84
Lotteries	1.31	7.26	0.00	0.00	0.00	0.60	0.00	0.00	2.36
Lotto	51.30	69.86	222.31	89.75	80.25	82.41	97.94	165.33	93.17
Minor Gaming	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.36	1.81
Pools	0.15	0.35	0.61	0.33	0.22	0.24	0.25	0.33	0.30
Total Gaming	709.37	1,385.12	1,343.37	938.71	709.31	651.76	960.10	514.94	1,020.34
Bookmaker (and other) Fixed									
Odds	0.00	2.58	2,516.91	0.00	0.05	0.00	0.00	0.00	25.17

TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS

Bookmaker (and other) Pool									
Betting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tab Fixed Odds	0.00	21.92	0.00	4.78	6.33	8.31	66.77	45.79	30.60
Tab Tote Odds	0.00	0.61	0.00	0.11	0.00	0.00	0.29	0.22	0.31
Total Sports Betting	0.00	25.10	2,516.91	4.89	6.39	8.31	67.06	46.01	56.09
Total All Gambling	764.46	1,571.13	10,130.39	1,030.07	795.01	760.27	1,121.10	682.54	1,251.39

Note. Adapted from Australian Gambling Statistics 1988-89 to 2016-17, 2015, 34th edition.

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In Victoria, the highest losses are registered in areas of lower socioeconomic status. This is discussed in the next section on EGMs. Even though online gambling is on the rise and there are many gambling products offered in Australia, EGMs are the form of gambling that is still linked with the most harm and societal damage (Productivity Commission, 2010). It is therefore important to examine this gambling product in more detail in the following section.

Electronic Gaming Machines (EGMs) and Poker Machines (pokies) in Australia/Victoria

EGMs, commonly referred to as 'pokies' in Australia, represent technological advances based on the old lever operated machines or 'one arm bandits'. Today they are computers run by a random number generator. Livingstone and Adams (2011) noted that of the \$17.5 billion lost on gambling in 2005-2006, 59% was on EGMs (Productivity Commission, 2010). The percentage is less now according to the 2016-17 data, but it is still greater than 50% (Australian Gambling Statistics, 34th edition). Table 6 below gives the relevant percentages. Note that some EGM losses are hidden in the figures for casinos.

Expenditure on EGMs are the highest in the Northern Territory (NT), followed by New South Wales (NSW) then Victoria (VIC). South Australia (SA), Tasmania (TAS), Western Australia (WA) and the Australian Capital Territory (ACT) have the lowest expenditure derived from EGMs (Delfabbro, 1992). Ninety four percent of around 200,000 EGMs are located in local clubs and hotels across Australia, with many arguing that they have a locational bias toward being in areas of relative socioeconomic disadvantage (Livingstone & Woolley, 2007; Marshall & Baker, 2002). EGM gambling is very money intensive but unlike other products doesn't impact positively on other businesses or the local economy, as a very small proportion of money made in state tax revenue is returned to the community it was taken from (Productivity Commission, 2010).

Table 6

Total Gambling Expenditure 2016-17

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	AUSTRALIA
Off-course bookmaker	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
On-course bookmaker	0.0%	0.3%	61.2%	0.0%	0.0%	0.0%	0.0%	0.1%	4.9%
On-course totalisator	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.5%	0.3%	0.2%
TAB	7.1%	9.8%	0.6%	8.4%	9.9%	12.9%	7.9%	17.4%	8.9%
Total Racing	7.2%	10.2%	61.9%	8.4%	10.0%	13.2%	8.4%	17.8%	14.0%
Casino	14.3%	16.2%	5.2%	18.6%	12.6%	27.3%	28.4%	46.1%	20.2%
Gaming Machines	69.8%	64.9%	5.0%	59.3%	63.3%	35.7%	47.7%	0.0%	51.2%
Instant Lottery	0.7%	0.4%	0.1%	1.9%	1.0%	1.5%	0.4%	2.5%	0.8%
Interactive Gaming	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Keno	1.1%	1.7%	0.7%	2.6%	2.2%	10.3%	0.4%	0.0%	1.5%
Lotteries	0.2%	0.5%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%
Lotto	6.7%	4.4%	2.2%	8.7%	10.1%	10.8%	8.7%	24.2%	7.4%
Minor Gaming	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.1%
Pools	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Gaming	92.8%	88.2%	13.3%	91.1%	89.2%	85.7%	85.6%	75.4%	81.5%
Bookmaker (and other) Fixed									
Odds	0.0%	0.2%	24.8%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%

TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS

Total All Gambling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Sports Betting	0.0%	1.6%	24.8%	0.5%	0.8%	1.1%	6.0%	6.7%	4.5%
Tab Tote Odds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tab Fixed Odds	0.0%	1.4%	0.0%	0.5%	0.8%	1.1%	6.0%	6.7%	2.4%
Betting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bookmaker (and other) Pool									

Note. Adapted from Australian Gambling Statistics 1988-89 to 2016-17, 2015, 34th edition.

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Another troubling aspect of EGM gambling is that the proximity of people's places of residence to EGM and mixed gambling venues is thought to have an impact on the prevalence of problematic gambling. However, research exploring such dimensions faces methodological challenges, such as the use of different modified measures with little or no psychometric testing (Vasiliadis et al., 2013).

In 2012, the anthropologist Natasha Schüll published a book called *Addiction by* Design. She drew on her 15 years of research work in Las Vegas and described in detail how EGMs (or slot machines, as they are called in America) are designed and manufactured. She demonstrated how various elements of the design of play are able to induce a trance-like state for the player. She illustrated how EGMs are made to distract the senses so that the part of the brain that is responsible for the decision-making process can become impaired. Once the player is in this trance-like state ('in the zone'), she contends that they continue to play, not to win, but just to keep playing (Schüll, 2012). Over the last 20 years, EGMs designs have continuously improved, with the aim that people spend more time and money and at an increased spending rate. With the consistent improvement of technology, people become addicted to the technologies that take away their capacity to make rational decisions, and they seem to forget negative experiences that they had in the past. In Australia EGMs have five electronic wheels displayed on a video monitor. Players are able to pick how many credits and how many lines they would like to play. The wheels stop randomly and each play outcome is independent from the one before (Dowling et. al, 2005; Productivity Commission, 1999). Even though all forms of gambling involve taking a chance and random patterns of payouts, EGM gambling is unique because of the complete isolation of the player, the rapid mode of placing a bet, and the possibility of a total distraction of all five senses (Schüll, 2012).

The outcome of each game is calculated by a random number generator. The computer translates the numbers into a symbol corresponding to a map which displays the outcome on the screen. This also leads to the display of the amount won. For example, three of the same characters will result in, for example, five credits won. Schüll (2012) documented in detail the evolution of the EGM games which are much more attractive and potentially more harmful than their older, mechanical predecessors because they are designed to facilitate the maximum time on the machine (Schüll, 2012). The Productivity Commission (2010) highlights these issues, focussing on the risks that high-intensity EGMs pose in stating that the risks of problem gambling are low for people who only play lotteries and scratchies, but rise steeply with the frequency of gambling on table games, wagering and, especially, gaming machines. Most policy interest centres on people playing regularly on the 'pokies'. Around 600 000 Australians (four percent of the adult population) play at least weekly. While survey results vary, around 15 per cent of these regular players (95 000) are 'problem gamblers'. Their share of total spending on machines is estimated to range around 40 per cent Recreational gamblers typically play at low intensity but if machines are played at high intensity, it is easy to lose \$1500 or more in an hour (Productivity Commission, 1999).

Due to the nature of the product and the liberalisation of EGMs in the 1990s, public concern about their impact on individuals and their families has grown. The first Productivity Commission Inquiry in 1999 into the Australian gambling industries found that the Commission viewed problem gambling – in all its dimensions – as a public or community health issue similar to alcohol (Productivity Commission, 1999). The Commission also found a strong link between EGMs and problem gambling, with about 80% of people who were accessing help services reporting problems with EGMs (Productivity Commission, 1999). Due to the commission's findings (1999) and increased research into the characteristics of EGMs, EGMs are now consistently regarded as one of the more high risk forms of gambling (Dowling, Smith, & Thomas, 2005; Lund, 2009). In particular, the risks of experiencing EGM-related harm is higher than other forms of gambling (Productivity Commission, 1999; Productivity Commission, 2010), which is reflected by the fact that it accounts for a disproportionately large slice of gambling expenditure in Australia (see Table 6). While problem gamblers report engaging in a broader range of gambling activities than do other gamblers, continuous forms of gambling such as EGMs have been shown to be the major cause of problems (Dowling et al., 2005).

In Victoria and South Australia, organised public protests sought to highlight these social impacts and to stand against government policy fostering the proliferation of EGMs (McMillen et al., 1999). The Victorian Competition and Efficiency Commission (2010) estimated that the direct costs to the Victorian government of problem gambling were approximately \$42 million in 2010-2011, and the indirect costs somewhere between \$6 and \$79 million. These estimates were only measuring problem gambling at the very high end of the problem gambling scale. It therefore came as a surprise when research commissioned by the Victorian Responsible Gambling Foundation in 2016 found that, even in the low and moderate risk categories, harm from gambling was very high (Browne et al., 2016).

In June 2017, there were 26,365 gaming machines operating in approximately 500 Victorian clubs and hotels. This equated to 5.40 gaming machines per 1,000 adults in clubs and hotels, which is the lowest density of all states and territories, except Western Australia where there are no gaming machines outside of the casino (based on data from Australian Gambling Statistics 34th edition). Like Brown, Crawford, Worthington, & Pickernell (2003), Brown, Pickernell, Keast, and McGovern (2016) also found that there was a regressive link between EGM concentration and areas of low social-economic status.

Figure 2 shows a graph highlighting the net gaming machine expenditure since 1991-1992 in nominal (not adjusted for inflation) and real terms (in 2016-2017 prices, adjusted for inflation). Between 2006 and 2016 a drop in net EGM expenditure has occurred, especially after the Global Financial Crisis (2008-2013) and the removal of Automated Teller Machines (ATMs) from gaming venues in July 2012 (Thomas, Lewis, Westberg, & Derevensky, 2013). Note also the relative decline in per capita losses (Figure 3).







Figure 3. Nominal and real net per capita gaming machine expenditure in original and 2016-17 prices. Adapted from Australian Gambling Statistics 1988-89 to 2016-17, 2015, 34th edition.

A study using the Australian Bureau of Statistics' Index of Relative Socioeconomic Disadvantage (IRSD) compared EGM losses in suburbs around Melbourne and concluded that EGMs caused more harm to disadvantaged communities than they caused to more resilient and socioeconomically advantaged communities (Rintoul et. al, 2013). More recently, Rintoul and Deblaquiere's (2019) research report for the Australian Gambling Research Centre, 'Gambling in Suburban Australia', compared gambling activity at two 'sites' of different socioeconomic status in suburban Melbourne:

Site 1, relatively more disadvantaged was selected for high levels of EGM gambling availability and consumption. This area incorporates six suburbs in western Melbourne within the City of Brimbank, an area of Victoria's highest EGM losses, as well as one suburb in the City of Maribyrnong. The suburbs selected were: Sunshine, Sunshine North, Sunshine West, Ardeer, Albion and Braybrook. Site 2, relatively less disadvantaged, was selected as it has around-average levels of gambling consumption compared to the rest of Victoria, and was in a similar proximity to the city to Site 1, as well as of similar geographical and population size. Site 2 comprised a cluster of six suburbs located in eastern Melbourne within the City of Whitehorse, including Box Hill, Box Hill South, Box Hill North, Blackburn, Blackburn South and Blackburn North.

Significantly, the authors identified social isolation and the absence of alternative spaces in the site of greater disadvantage as significant contributors to the 'magnification of harms' experienced. Regarding the former, they concluded that social integration (a form of social capital) has been shown to improve health status (Berkman & Glass, 2000). Many of the studies participants who gambled reported dislocation from their families and social networks. In some cases, those who already experienced isolation and loneliness began gambling as a way to address this situation. Participants described the apparently 'non-threatening' environment of the EGM venue, in which lone attendance is common and where staff seem friendly and welcoming. In other cases, isolation was a consequence of harmful gambling behaviour that strained relationships. For these participants, it was very difficult to rebuild trust with friends and family, even after they had reduced or ceased gambling (Rintoul & Deblaquiere, 2019)

Under these circumstances, gambling-related harm is significantly magnified and intensified in areas already experiencing considerable socioeconomic disadvantage (Site 1), when compared with a less disadvantaged area (Site 2). This is unsurprising, given households with fewer resources struggle to absorb continued losses of large sums of money. (Rintoul & Deblaquiere, 2019)

The Productivity Commission (2010) estimated that 15% of individuals who gamble on EGMs on a weekly basis or more frequently were problem gamblers, and a further 15% were classified as 'moderate or at risk' gamblers. These individuals playing weekly or more frequently make up around 80% of problem gamblers (Productivity Commission, 2010; Rintoul et al., 2013). When problem gambling is coupled with the fact that EGM venues tend to be clustered in areas with lower socioeconomic status (Livingstone & Woolley, 2007), harms are accentuated or 'magnified' (Rintoul & Deblaquiere, 2019). Indeed, an early study on the economic impact of EGMs in four low socioeconomic areas in Melbourne found that they impact negatively at all levels of the community (Doughney & Kelleher, 1999). A further study by Barratt, Livingston, Matthews & Clemens (2014) supported this research and found there is an association between the rates of problem gambling and EGM density. The pattern of where they are located correlated strongly with the amount of money lost per capita (Vasiliadis et al., 2013).

To protect vulnerable communities from losses which would further disadvantage them and also in an attempt to reduce gambling related harm in Victoria, gaming machine numbers were capped (Livingstone & Woolley, 2007). In 2009 under the Gambling Regulation Act 2003, EGM entitlements were allocated and the maximum number of gaming machines determined. There are 20 capped regions in Victoria. These regions are bound by a limit of machines set by LGA. Regional caps are set by the Minister for Gaming and Liquor Regulation and are calculated at a ratio of 10 EGMs per thousand adults. If the number of adults in the region declines, the entitlements are not able to increase. In areas that are not covered by regional caps municipal limits apply. Since 2009, those limits cover most areas in Victoria and are also calculated at a ratio of 10 machines per thousand adults. In contrast to regional caps, if the population number in the area increases, EGM numbers may increase as well.

Summarising the facts presented in this chapter, it is obvious that gambling in Australia and Victoria is popular entertainment and that the gambling industry and Australian governments benefit from this commercially viable way to generate income. On the other hand, there is also sound evidence that gambling, especially on EGMs, causes harm. However, not everybody who gambles develops problematic gambling behaviours which leads to gambling related harm. Therefore, to understand the relationship between problematic gambling and harm caused by it, the following chapter will describe some of the conceptual issues surrounding this topic. It will explain the difficulties arising because of a lack of commonly agreed definition of the behaviour. It will include a description of the most common measures used to assess the level of the severity of gambling harm and will explain risk factors associated with problem gambling.

CHAPTER III

Gambling and Gambling-Related Harm

In 2010, the Productivity Commission estimated that around 15% of Australians gamble weekly, with one in 10 of those displaying symptoms of harm related to gambling (Productivity Commission, 2010). In 2016, a study commissioned by the Victorian Responsible Gambling Foundation (VRGF) into the potential harm that gambling can cause found that 85% of all gambling related harm is due to at-risk gambling; only 15% is linked with problem gambling. This study proposed a conceptual framework which summarised harm experienced across 10 domains: health, emotion, financial, performance, relationship, neglect, cultural, life course, generational and intergenerational harms. This study concluded that the majority of problem gambling related harm is experienced by 'low risk' category gamblers (just over 50%), followed by 'moderate risk' gamblers (34%), and lastly by 'problem gamblers' (15%) (Browne et al., 2016). The data supporting this statement comes mainly from self-report population surveys or admission of people who access counselling services (Browne et al., 2016).

The phenomenon of problematic gambling, however, is characterised by a lack of a commonly agreed upon definition, which makes it difficult to standardise gambling treatments. There are different terms describing problematic gambling and most of them refer to the far end of severity. The most common ones are *Pathological Gambling*, *Gambling Disorder* and *Problem (Problematic / Disordered) Gambling*. The following section looks at the various terms and how they are reflected in both government policies and development of treatment options.

Definitions of Problem(atic) Gambling Behaviour

Pathological gambling is a condition with diagnostic criteria, as listed in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV), which was changed to 'gambling disorder' in the current, fifth, edition (DSM-V). The definition is adapted from the substance dependence criteria (Lesieur & Rosenthal, 1991; Rosenthal, 1992). The term dependence was introduced by the World Health Organisation because of disagreement and confusion about the term addiction (World Health Organization, 1969). The DSM-III, DSM-IV, and DSM-V use of the term dependence as addiction was not used for behavioural problems. The term was only used when referring to a substance, for example alcohol and other drugs of dependence. However, the word dependence as used by the DSM-V included components of both physiological dependence (withdrawal and tolerance) and psychological dependence (craving, preoccupation). The rationale of why it is now used for pathological gambling is that problematic gambling behaviour demonstrated commonalities with substance use disorders. Hence, in its online prologue to the definition of gambling disorder, the American Psychiatric Association notes that in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), gambling disorder is included in a new category on behavioral addictions. This reflects research findings that gambling disorder is similar to substance-related disorders in many ways. Recognizing these similarities will help people with gambling disorder get needed treatment and services, and may help others better understand the challenges (APA, 2019).

Pathological Gambling is also included in the International Classification of Diseases, 10th revision (ICD-10) (Hodgins, Stea, & Grant, 2011). The Productivity Commission report (2010) found that there is a problem with diagnosing gambling as a 'medical' condition through a binary classification system based on the notion of pathology.

More recently, this pathological framework has evolved into a more 'sliding scale' model where the term 'problem(atic) gambling' is often seen as a less severe condition and is most commonly used in prevalence studies worldwide. Other words used to describe problematic gambling behaviour are 'gambling disorder', 'compulsive' and 'addictive' gambling. As with many other problematic behaviours, gambling harm occurs on a continuum. From low-level to high-intensity participation in various gambling activities, harm can be experienced on a variety of levels by an individual, their families, and the wider community. To date, there is no internationally agreed upon definition of problem gambling that encompasses the financial, physical, emotional, spiritual, and social negative impacts of harm experienced as a consequence of it.

In Australia, Neal, Delfabbro, & O'Neill (2005) developed a national definition for problem gambling in response to this lack of a robust definition. Without a clear definition, it seemed almost impossible to measure the impact of gambling related harm. What most commonly is described in the problem gambling literature is the harm caused by the behaviour. Harm to the individual causing negative consequences to their health and wellbeing, financial situation (sometimes resorting to crime), their work and/or study, their mental health, and their relationships. To encompass the spectrum of the harmful consequences relating to the behaviour as well as the behaviour itself, the following definition for 'problem gambling' is used in this thesis: "Difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or for the community" (Neal, Delfabbro, & O'Neil, 2005). This very general definition leaves scope for many explanations of why people are not able to control their gambling behaviour, as it incorporates harmful consequences relating to the behaviour as well as the behaviour as well as the behaviour, as it

Another way of describing problematic gambling behaviour has been to characterise it as a mental illness. This was particularly the case early in the 1980s, predominantly in the United States (Rosecrance, 1985). While some problem gamblers do have pre-existing mental health conditions, such as depression, impulsivity disorders, and bipolar disorder (Hollander, Pallanti, Allen, Sood, & Rossi, 2005), that may predispose them to facing issues with gambling, many Australian gambling help professionals and researchers do not characterise problems with gambling as a medical or mental health issue (Hare, 2009).

Instead, problem gambling in Australia is most commonly framed as a public health issue (Browne et al., 2016; Korn & Shaffer, 1999; Messerlian, Derevensky, & Gupta, 2005). Framing problem gambling as a public health issue has attempted to take the focus away from an individual and the harmful consequences they experience. A public health approach has emphasised that unlike narrower clinical models of gambling, a public health perspective addresses all levels of prevention as well as treatment and rehabilitation issues. It promotes the welfare of individuals by fostering healthy, strong and safe families, communities, and workplaces. It views the individual within a social context and explores the influence of cultural, family, and community values on behaviour. It does not just look at the behaviour of individuals but it takes into consideration organisational and political behaviour. It examines public policy (e.g., income, education, health care, and employment) and asks whether the policy fosters or discourages health. It views behaviours such as gambling along a healthrelated continuum (i.e., health enhancing or illness producing, rather than as the sick/well dichotomy of health care practice; Korn & Shaffer, 1999).

Those accepting gambling as a public health issue have acknowledged that, in order to minimise harm, interventions need to address all levels of prevention, including, primary, secondary, and tertiary interventions (Dickson-Gillespie, Rugle, Rosenthal, & Fong, 2008). Korn and Shaffer (1999) used the metaphor of infectious disease to describe how problem gambling can be explained under a public health model. A person who is affected by problematic gambling is a *host*, a particular gambling activity is an *agent*, and the money gambled, the time spent gambling, and the environment becomes a *vector*. The environment incorporates all the physical influences, the venue, the location, the distance to their home,

and cultural and political influences (Korn & Shaffer, 1999). Thinking in these terms has helped to address the different aspects involved in a person being harmed by gambling.

While quantifying some aspects of these harms, such as suicide, can be a difficult exercise, evidence suggests that for each person affected by problem gambling, the cost is equivalent to many thousands of dollars. The large financial losses experienced by problem gamblers is seen to be the main contributor to harm and, if these costs are accumulated across those on the far end of the spectrum who experience major problems, the conservative cost was estimated to be \$4.7 billion annually (Productivity Commission, 2010). The Productivity Commission (2010) also found that for every person who is directly affected by problem gambling between seven and 10 others are indirectly affected (Goodwin, Browne, Rockloff, & Rose, 2017). From June 2013 to June 2014, an estimated 2.79% of Victorian adults (122,493 Victorian adults) reported experiencing harm because of someone else's gambling activities. In addition, approximately 41.59% of problem gamblers had experienced problems from their own gambling in the same period (Hare, 2015). It is suggested, however, that some problem gamblers may not fully recognise the harm from their gambling activity due to denial or stigma and therefore are not captured in any study (Hare, 2015). All the factors mentioned above and the social costs involved with gambling related harm make it important to develop appropriate policy measures, even those with a modest efficacy in reducing harm (Productivity Commission, 2010).

In addition, research has highlighted that people experiencing problem gambling related harm were significantly more likely to experience a variety of life events in the past 12 months compared to non-problem gamblers. The following Table 7 lists the common life events and significant issues often faced by problem gamblers (Hare, 2009).

Table 7

Common Life Events and Significant Issues Faced by Problem Gamblers

Examples of common life events	Examples of significant issues
Report the death of someone close to them	Troubles with work, boss or superiors
Report a divorce	A major change to financial situation
Report legal difficulties	Social isolation
Report a major injury or illness to either	Increased arguments with someone they are
themselves or someone they are close to	close to

Holdsworth, Nuske & Hing (2012) conducted a study with 40 people, all of whom had experienced significant traumatic life events, and examined the impact these events had on their gambling behaviour. They conducted telephone interviews with 20 people who were in counselling for issues of gambling related harm and 20 people who just gambled recreationally. All of the participants had experienced significant issues throughout their lives. The findings suggested that the recreational gambling group were able to draw on a much stronger social network and had stronger coping mechanisms that enabled them to deal with those issues in a more positive way than the group that was identified as problem gamblers (Delfabbro, 1992; Holdsworth, Nuske, & Hing, 2015).

Prevalence of Problem Gambling in Victoria, Australia, and Associated Risk Factors

In Australia, 80% of people gamble at least once a year, with the most popular forms of gambling based on participation rates being lotteries (60%), EGMs (35%) and racing (20-25%) (Delfabbro, 1992). While the prevalence of problem gambling varies by state, most jurisdictions endorse problem gambling estimates between 0.5-1.0% with another 0.5-1.0% at risk of developing gambling problems. The lowest prevalence rate of problem gambling is found in WA, where EGMs are only in the casino and not in clubs and/or hotels, as is the case in all other Australian states (Productivity Commission, 2010). EGMs are believed to cause between 75-80% of gambling related problems (Delfabbro, 1992). The Productivity Commission (2010) suggested that up to 40% of gambling revenue is derived from people with gambling problems. In Victoria, 8.91% (or 391,188 people) are in a 'low-risk' category

for problem gambling, 2.79% (or 122,493 people) are in a 'moderate-risk' category, and 0.81% (or 36,000 people) have serious gambling issues (Browne et al., 2016). As stated previously, harm from problem gambling can be experienced on an emotional, financial, social, vocational, and legal level. It can lead to an overall decline to a person's general wellbeing and lead to serious psychological issues, such as anxiety, clinical depression, and suicidal ideation (Maccallum & Blaszczynski, 2003).

People experiencing gambling related harm often present with other behaviours which impact negatively on their wellbeing. For example, between 20-50% of people experiencing gambling related harm also experienced negative impacts on their employment, and about 30% of severe problem gamblers have committed crimes to support their problematic behaviour (Delfabbro, 1992). Individuals with poor English language skills, mental or intellectual health disabilities, and those who have recently faced emotional distress are particularly vulnerable to problems with gambling (Productivity Commission, 2010).

Moderate, at risk, and problem gamblers are also more likely to seek medical attention, with these individuals attending their general practitioner (GP) approximately seven to eight times per year on average, compared with 5.6 times per year on average for the general Australian population (National Health Performance Authority, January 2015). Concerned significant others (CSOs) of individuals with problem gambling also commonly experience various forms of adversity and are significantly affected by gambling activities. A study by Dowling and colleagues (2014) found that CSOs reported having a common profile, with emotional distress (97.5%), relationship impacts (95.9%), social life impacts (92.1%), and financial impacts (91.3%) being the most commonly reported. The least commonly reported, but still significant, impacts were on employment (83.6%) and physical health (77.3%) (Dowling, Rodda, Lubman, & Jackson, 2014).

Taking into consideration the negative consequences associated with problematic/pathological gambling, many research projects have focused on identifying risk factors that could lead people to develop problematic gambling behaviours. Many psychological explanations lie behind problem gamblers' loss of control and continued gambling behaviour despite extremely negative consequences. Studies have shown that normalisation of gambling by family members, comorbidities, and other social risk factors can have significant impacts on individuals with gambling problems. In Australia, the normalisation of gambling is reflected in the fact that people can gamble online 24 hours a day, seven days a week. The increasing gambling options make for easier access. The fact that sporting clubs and other community clubs endorse gambling and continuously promote it gives people the impression that it is normal to gamble and that everyone does it (Thomas et al., 2018). It is hard to determine if many problems related to gambling genuinely are caused by gambling or if gambling provides a way to alleviate pre-existing or co-existing problems. Comorbidities, financial difficulties, relationship issues, and psychosocial risk factors are commonly attributed to the development and continuation of problematic gambling behaviour, The bidirectional relationships complicate conclusions on causality. The following sections look at two significant risk factors associated with problem gambling: comorbidities and familial and psychosocial factors.

Comorbidities and problem gambling. A comorbid condition in an individual is an identified risk factor associated with a problem (Holdsworth et al., 2015). Research suggests that about 50-60% of problem gamblers smoke cigarettes, compared to 22% of non-problem gamblers, and about 30-40% also engage in other substance abuse (Maccallum & Blaszczynski, 2003). The largest psychiatric epidemiological study undertaken to date, by the National Epidemiologic Survey on Alcohol and Related Conditions including Gambling

(NESARC), concluded that problem gamblers had an increased risk of alcohol and other substance misuse compared to non-gamblers.

Furthermore, mental health conditions such as major depression, anxiety, and panic disorder were more prevalent in problem gamblers than non-gamblers (Petry, Stinson, & Grant, 2005). There are many other studies supporting these statements. For example, a systematic review of a community sample found that problem gamblers experience high levels of other comorbid disorders such as alcohol use disorder, depression, substance use disorders, nicotine dependence, anxiety disorders, and antisocial personality disorder (Lorains, Cowlishaw, & Thomas, 2011). This link between comorbid disorders and gambling is well researched and identified (Hall et al., 2000; Hare 2009; Ladd, Molina, Kerins, & Petry, 2003). When Quigley and colleagues in (2015) examined comorbid problem gambling and rates of major depression in a community sample, they found that problem gamblers with comorbid depression experienced greater problems with gambling, poorer family functioning, and higher levels of neuroticism than problem gamblers without depression. These results remained when comparing problem gamblers to recreational gamblers with depression (Quigley et al., 2015). Notably, one study found that men were more likely to experience depression and anxiety as a reaction to their problem gambling, whereas women were more likely to experience them as symptoms of their problem gambling (Holdsworth et al., 2015).

More recently, Dowling, Cowlishaw, Jackson, Merkouris & Francis (2015) conducted a study focused on identifying the prevalence of psychiatric comorbidities among treatmentseeking problem gamblers. The comprehensive review and meta-analyses of 36 peer reviewed studies clearly identified high rates of comorbidities among people seeking treatment for problem gambling, across the harm spectrum, including pathological gambling. It found the highest mean prevalence was for nicotine dependence (56%, 95% CI 35.7-75.2) and major depressive disorder (29.9%, 95% CI 20.5-41.3), with smaller estimates for alcohol dependence, social phobia, post-traumatic stress disorder, cannabis use disorder, and others (Dowling et al., 2015). Depression and anxiety were the most commonly experienced. Rush, Bassani, Urbanoski, and Castel (2008) discovered that the prevalence and degree of problem gambling increased with the substance abuse disorder severity. In another study Suomi, Dowling, and Jackson (2014) investigated if there were gambling subtypes based on pre-existing comorbidities. They interviewed 202 gamblers who were in treatment for their gambling. They found that the group with no comorbidities scored lower on the problem gambling severity scale and reported current abstinence. The same was found for young men who worked full time and also used drugs and alcohol. The group with multiple comorbidities displayed more problems and reported a high rate of aggression.

There is also evidence that problem gambling and suicidality can be linked. The Productivity Commission (1999) found, after interviewing professionals who were working in counselling services treating people with gambling problems, that 57% of clients reported having serious thoughts about committing suicide. In 2013, the Coroner's Prevention Unit (CPU) of the Coroner's Court of Victoria identified 128 gambling-related suicides reported to the Coroners Court of Victoria between 1 January 2000 and 31 December 2012. These included 126 suicides of people who had engaged in problem gambling, and two suicides of people who were adversely affected by a partner's problem gambling." (CPU, 2013)

Familial and psychosocial risk factors. Experiencing significant negative life events (listed in Table 7), including negative childhood experiences, can increase the risk level of an individual developing problems with gambling (Hare, 2009; Hodgins et al., 2011; Holdsworth et al., 2015; Saugeres, Thomas, & Moore, 2014). Gambling as a way to escape the emotional pain of negative life events, including early family experiences, is recognised to be among the main motivations among problem and at-risk gamblers (Saugeres et al., 2014). This is also evident in the Holdsworth et al. (2015) study, as problem gamblers

increased their gambling in reaction to significant negative events or psychological problems, whereas recreational gamblers did not. Cookman & Weatherly (2015) discovered that age and ethnicity were not linked to predicting escape as a motivation to gamble but were inherently linked to problem gambling. The study also demonstrated that gambling as an escape is associated with problem gambling, which aligns with Saugeres et al.'s (2012) results.

The level and context of exposure to gambling as a child also influences the varying risk levels of problem gambling as adults (Dowling, Jackson, Thomas, & Frydenberg, 2010). Dowling et al. (2010) found that research participants with problem gambling fathers were 10.7 to 13.5 times more likely to display problem gambling behaviours and 3.6 to 5.1 times more likely to display at-risk or moderate risk gambling than were their peers. Participants were 6.7 to 10.6 times more likely to display problem gambling behaviour and 1.1 to 1.7 times more likely to display at-risk or moderate risk gambling than were their peers if they had a mother who had gambling problems. Saugeres, Thomas, & Moore (2014) supported these findings by showing that several of the problem and at-risk gamblers had an early exposure to problem gambling in their childhood, as well as other family dysfunctions. In addition, the majority of problem and at-risk gamblers had identified experiencing a lack of family cohesion during their childhood (Saugeres et al., 2014).

Various sociocultural factors are also recognised as predisposing and influencing an individual's pathway to problem gambling. In the Holdsworth (2015) study, problem gamblers were shown to have weak social support networks in comparison to recreational gamblers. When Clarke et al. (2006) investigated the key indicators that demonstrate a transition from social to problem gambling, they found similar indicators utilised for substance abuse, including availability of gambling activities, lower socioeconomic status, and a lack of social and cultural empowerment. Gupta and Derevensky (1997) also highlighted the complex mix of familial and sociocultural factors that can influence an

individual's problem gambling. A more recent study (Russell, Langham & Hing, 2018) investigating the importance of social influences found that people who were strongly connected, and influenced by, people in their networks who gambled were more likely to develop gambling problems and experience gambling related harm than those who were not (Russell, Langham, & Hing, 2018).

The broader social networks of a person, for example a strong connection with others and a sense of belonging to a community, are strongly linked to a person's overall sense of wellbeing and the use of better coping skills than individuals without them (Putnam, 2001). McQuade and Gill (2012) found that gambling and loneliness were strongly linked, rendering the latter a recognised risk factor for gambling, especially for people from non-English speaking backgrounds (McQuade & Gill, 2012). Another study concluded that women who felt lonely, were drawn to EGM gambling as their preferred pastime activity (Holdsworth, Nuske, & Breen, 2012). Despite having strong evidence that loneliness or social isolation across the population of Australia can be linked to poorer physical and mental health (Hawkley & Cacioppo, 2010), few studies so far have explored social isolation and loneliness as risk factors for developing problem gambling behaviour. Among the older population in Australia, circumstances such as losing a partner, retirement, and other age-related issues can explain their engagement in gambling (Southwell, Boreham, & Laffan, 2008). There is also a greater vulnerability to developing gambling problems among Indigenous people in Australia, partly due to a lack of money to engage in other leisure activities, high comorbidities with drug and alcohol problems, and a higher rate of psychological problems.

It is proven that gambling can cause harm and that there are common risk factors such as lack of social connections can be associated with problem gambling. This is relevant to the questions addressed by this thesis. The following section describes the most commonly used screening and assessment tools used to determine problem gambling behaviour and its prevalence in Australia.

Screening and Assessment Tools to Measure Problem Gambling Prevalence

Many research studies will include a screening instrument to diagnose problem gambling and to measure its prevalence. The following sections will give an overview of the most commonly used tools used to screen for, or assess the severity of, problem gambling.

There are a variety of screening and assessment instruments used to evaluate the level of problematic gambling behaviour, which reflect the different ways of understanding the aetiology and characteristics of this behaviour. However, there is no clearly identified and recognised instrument that researchers use to measure problem gambling severity in an individual. The same statement can be applied to past and current problem gambling prevalence community studies. This may be one reason why, even to date, it is not easy to clearly use research findings about the severity of problematic gambling behaviour as a basis from which to develop adequate interventions and policies. There are a variety of measures used to determine the severity of gambling related harm but, even among academics, there is a constant debate about their validity and relevance. Currie, Miller, Hodgins and Wang (2009) narrowed it down to three sources upon which the current measures draw: diagnostic criteria of pathological or problem gambling, behavioural symptoms associated with disordered gambling, and the negative consequences of the behaviour (Currie, Miller, Hodgins, & Wang, 2009). To date, there are five primary measures used in Australia to assess the severity of the gambling problem. The DSM-V, the South Oaks Gambling Screen (SOGS), the Victorian Gambling Screen (VGS), the eight screen (8-screen), and the Canadian Problem Gambling Index (CPGI/PGSI). The VGS was developed solely for assessing problem gambling in Australia as a response to criticisms of the SOGS. Even though the VGS measures the level of the gambling problem in more detail than the SOGS, it needs further testing before it can

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be considered fully validated and used widely. The CPGI/PGSI has now been adopted as the main measure at an individual level in most state-funded services in Australia and it is commonly used for prevalence research. Sullivan (1999) developed the 8-screen for general practitioners (GPs) in New Zealand to determine quickly if a more formal diagnosis would be required. However, it is not a diagnostic tool in itself. The following sections will describe in more detail the commonly used screening and assessment tools, explain how they differ, and note how they are used in Australia.

The Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-V). In 1980, pathological gambling was recognised as a clinical disorder and, in 2000, it was listed in the DSM-IV as an impulse control disorder not otherwise classified. The term pathological gambling is a clinical description and was used when a person meets DSM-IV criteria, whereby a person must display five out of 10 listed symptoms (DSM-IV-TR; American Psychiatric Association, 2000). Examples of these symptoms include a preoccupation with gambling, chasing losses, and increasing the amount spent gambling to experience the high which comes from being involved in the activity. With the introduction of the DSM V (American Psychiatric Association, 2013), the diagnosis and classification of gambling behaviours has changed to *gambling disorder*, and this classification puts gambling now in the same category as substance and alcohol addictions, albeit as a behavioural addiction. The previous classification in the DSM-IV included engaging in illegal activities to support the gambling behaviour. This has been removed, and people now only need to meet four out of nine possible symptoms for a diagnosis of gambling disorder. The DSM-V can be administered in a one-on-one interview style or in a questionnaire format and is the only recognised clinical tool which is accepted by the courts internationally and in Australia.

South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987). The SOGS is a 20-item screen mainly used in clinical settings. While the SOGS was developed based on the

DSM-III classification testing involving a non-gambling control group, it was never intended to replace the DSM-III (Lesieur & Blume, 1987). This tool was designed to identify problematic gambling behaviour quickly, with the intention of improving the speed with which further assessment and treatment was decided. This screen has been used for a variety of studies and, despite questions about the accuracy of the screen, has demonstrated good to excellent assessment quality in a clinical setting. However, it did not perform well in a general population survey when compared against the DSM-IV diagnostic tool (de Oliveira et al., 2009; McMillen & Wenzel, 2006; Stinchfield, 2002). The SOGS was not without criticism, especially from Australian and Canadian researchers (Abbott, Volberg, Bellringer, & Reith, 2004) who found that 24% of people who scored five or more on the SOGS in 1991 were not classified as problem gamblers if tested using the DSM-IV criteria. They also argued that this screen was only tested in clinical settings and that its use as a measurement tool for population surveys without further testing would be wrong (Blaszczynski, Jackson, & Thomas, 2003).

Doughney (2007) criticised the use of telephone surveys to determine the prevalence of problem gambling, including the use of the SOGS. He demonstrated this by using evidence and arguments from the Productivity Commission report (1999), the Australian Bureau of Statistics, and statistical/epidemiological sources. His main argument was that it is not possible, using the existing sample survey techniques to capture the real prevalence (Doughney, 2007). One major cause is that many people either do not disclose, or understate, the issue when completing a survey. This is mainly attributed to the current stigma associated by problem gambling.

Confusion also exists about the SOGS definition of problem gambling because it suggests that problem gambling is a less severe form of pathological gambling. Seeing that it is now widely accepted that problem gambling is defined on a continuum from *at risk* at one

end to *problematic* on the other end of the scale, it is not consistent with most of the theoretical approaches that are accepted to date. Another critical argument was that, while the SOGS was a useful tool, it was developed before the introduction of EGMs (Focal Research Consultants, 2001). The originators of the SOGS only ever intended for it to be used as a clinical tool despite other researchers using it as a population prevalence measure (Problem Gambling Research and Treatment Centre, 2011). Despite the criticism outlined above, the SOGS can distinguish between gamblers and problem gamblers and is still used frequently in problem gambling research.

The Canadian Problem Gambling Index/Problem Gambling Severity Index (CPGI/ PGSI; 2001). The CPGI was developed to measure problem gambling in Canada. Ferris and Wynne (2001) developed the CPGI as an attempt to improve on the accuracy of the DSM-IV and the SOGS, especially in a non-clinical setting. They argued that the DSM-IV was too clinical in providing a dichotomous measure and that the SOGS had not been validated properly to determine prevalence of problem gambling in a wider community setting (J. Ferris & H. Wynne, 2001). The original CPGI/ PGSI measure consisted of 31 items. The problem gambling assessment part includes 12 items, of which nine are scored to form a Problem Gambling Severity Index (PGSI). The PGSI (i.e., a nine question subset of the CPGI) measures two domains over a 12-month period: problem gambling and gambling harm. In contrast to the DSM-V, wherein a person either has or does not have a pathological condition, the PGSI results categorise the outcome on a continuum of risk into non-gambler, low risk, moderate risk, or problem gambler. The PGSI is commonly used for prevalence surveys in many countries, including Australia, although some issues have been raised in relation to its use in modified forms in some jurisdictions (Jackson, Wynne, Dowling, Tomnay, & Thomas, 2010).

It is important to mention that there is a significant overlap between all scales discussed. The PGSI is the most commonly used instrument to assess problem gambling in wider populations. Assessment of problematic gambling behaviour in a clinical context and the prevalence of problem gambling in the general population are both important. The next chapter will explain the different theoretical approaches which are currently used to understand how and why some people become problem gamblers while others do not.

Theoretical Approaches to Understanding Problem Gambling

There are many reasons why people gamble, and there is no one proven and accepted theoretical model to explain why some people develop a problem while others do not. For some people, gambling is used to escape from negative emotional states and to induce a state of dissociation as well as self-treatment of mental health conditions, like depression (Jacobs, 1986). For others, it is the enjoyment or the excitement of an adrenalin-driven activity, the positive aspect of winning and the possibility of financial gain (Blaszczynski & McConaghy, 1989). The actual gaming venue is also of great importance to many, especially the socially isolated and elderly who go to gaming venues to enjoy the venue as their *Third Place*. The sociologist Ray Oldenburg (1999) described the Third Place as a place where people gather for the sheer pleasure of good company and lively conversation (Oldenburg, 1999, 2001).

Gambling can provide a distraction from worry, and this can become a powerful motivator for people who experience problematic gambling behaviour. Very often people displaying problematic gambling behaviour refer to their motivation as a vehicle to escape their sometimes challenging situations. This is often the motivation for why they start gambling in the first place. Interestingly, though, most problem gamblers will not bet the minimum amount to prolong the time they could gamble. This would make sense, if wanting to escape is the only reason they gamble. Underlying those motivators to gamble, it is possible that many people are socially isolated and that the gambling environment and the activity produces a false sense of belonging (McQuade & Gill, 2012). Loneliness, also a recognised risk factor for developing a gambling problem, is experienced very differently by different people and has various underlying reasons (Aanes, Mittelmark, & Hetland, 2010).

As mentioned before, problem gambling is a complex issue and, to date, there is no single theoretical approach that can explain the aetiology of problem gambling. There are, however, various single theory concepts which have overlapping elements and/or are used to develop and determine the direction for appropriate interventions.

Learning Theory

Operant conditioning is a method of learning that happens through applying rewards and punishments to a behaviour. The gambling behaviour is reinforced because of rewards and/or reinforcement, and this increases the likelihood that the behaviour will be repeated. This theory is based on early experimental work with animals and is often referred to as operant conditioning. Even though all forms of gambling could be described using those principles, EGMs may initiate this problematic gambling behaviour quicker because of the capacity to be operated continuously as well as at a very rapid pace. The anticipated financial reward, which could happen with every button push, and anticipation of the win triggers almost the same emotional response as the actual win (Delfabbro et al., 2011). The gambling environment itself is designed to fuel the anticipation of a win. Players become conditioned to various cues, such as the venue, specific times, and/or sounds, as well as various emotional states, and anticipate the feeling of winning. If people had a large win early on, when they started gambling, then they most likely want to repeat this experience (Delfabbro et al., 2011). The lack of predictability of outcomes keeps people gambling. This theory explains some aspects of gambling but cannot really explain why some people exposed to the same mechanisms develop significant problems while others do not.

Cognitive Theory

The cognitive approach to understanding problem gambling assumes that people develop false beliefs and assumptions about gambling, such that they believe that they can predict or manipulate gambling outcomes based on their skills or their false beliefs about randomness. Irrational beliefs about the odds of winning are present in more than 80% of people taking part in various research around this theory (Gaboury & Ladouceur, 1989; Ladouceur et al., 2003), and these irrational beliefs are independent of the individual's statistical knowledge (Ladouceur et al., 2003). Delfabbro and Winefeld (2000) conducted a study of 20 regular EGM players in Adelaide, South Australia. They recorded behavioural and outcome data which showed that the higher the irrational beliefs of the EGM player, the more risks the player took in regard to their gambling behaviour. In particular, the characteristics of electronic gaming devices are designed to foster false expectations in regard to the outcome of the activity (Dowling et al., 2005). Various researchers have recognised different erroneous cognitive beliefs using psychometric measures and experimental manipulation (Ladouceur et al., 2003; Petry, 2005a). Some of these beliefs include the 'gambler's fallacy', personalisation of the EGM, illusion of control, and belief in personal luck. Even though explaining the occurrence of problematic gambling through this cognitive theory has gained support from many researchers, it fails to explain why some people with similar irrational beliefs become problem gamblers while others do not.

Personality Theory

Many studies have attempted to identify whether one personality type is more likely to develop a gambling problem over another. To date, there are no consistent findings on a personality profile, though some traits (e.g., thrill seeking, impulsivity etc.) might be important and should be identified as risk factors in the aetiology of gambling. A fundamental aspect of human character is to engage in impulsive behaviour without thinking about the consequences (McElroy, Hudson, Phillips, Keck Jr, & Pope Jr, 1993). In 1980, problem gambling was included among other impulse control disorders in DSM-III (American Psychiatric Association, 1980). Even though other studies seemed to identify a higher lack of control and higher rates of impulsivity among problem gamblers (McCormick, Taber, Kruedelbach, & Russo, 1987), they did not include impulsivity measures and they lacked controls. Further studies by Petry (2001, 2002) and Allessi and Petry (2003) found strong links between problem gambling and impulsivity, indicating that impulsivity as a personality trait plays a part in the development of problem gambling.

The Disease Model

As mentioned before, gambling addiction was classified in the DSM-IV as an impulse control disorder. Marlatt, Baer, Donovan and Kivlahan (1988, p.224) define addictive behaviour as:

... a repetitive habit pattern that increases the risk of disease and/or associated personal and social problems. Addictive behaviours are often experienced subjectively as 'loss of control' – the behaviour contrives to occur despite volitional attempts to abstain or moderate use. These habit patterns are typically characterised by immediate gratification (short term reward), often coupled with delayed deleterious effects (long term costs). Attempts to change an addictive behaviour (via treatment or self-initiation) are typically marked with high relapse rates" (Marlatt, Baer, Donovan, & Kivlahan, 1988, p.224).

To understand and address problem gambling through the disease model, it is important to mention that it is based on a model used to explain alcohol and drug addiction. The term addiction was used to explain why people continuously give in to uncontrollable urges to use drugs or alcohol despite being fully aware of the negative consequences associated with their use (American Psychiatric Association, 2000). This model is rejected by many Australian researchers (Walker, 1992) because people often outgrow addictions, sometimes without ever labelling themselves as addicts. Given that this theoretical model fails to explain the most fundamental aspects of compulsive drinking and drug taking, it hardly does better with explaining gambling behaviour. Indeed, a problem with applying the addictions model to understanding gambling is that there are no identifiable physiological processes which characterise gambling, as they do for drugs and alcohol. Even though gambling does not involve ingestion of a drug, there is now a common understanding that an alteration of bio-chemicals in the brain can induce a drug-like state which may be considered a functional equivalent of an addiction. The common understanding of addiction is that it is linked with the experience of negative consequences. Griffiths' paper (2005) listed common components of addiction, such as salience, mood modification, tolerance, withdrawal, conflict, and relapse. He argued that behavioural addictions such as gambling are always multifaceted and should not be looked at through the lens of one theoretical model (Griffiths, 2005). Unlike drug and alcohol addictions, in which people continue to consume the substance to avoid the pain of withdrawal, gambling continuously provides people with positive reinforcements (e.g., the anticipation of a win).

It is therefore unsurprising that clinical studies also tend to support viewing problematic gambling through the lens of the addiction model. High rates of comorbidity between pathological gambling and substance abuse (Petry et al., 2005) and similar neurobiological activity and genetic abnormalities among people who are substance dependent have been found. Common molecular brain pathways involving cortico-mesolimbic brain structures highlight the similarity in changing the brain by excessive gambling activity in the same way excessive substance abuse does (Goudriaan, Oosterlaan, de Beurs, & Van den Brink, 2004). Linked to the evident reward and reinforcement process with problem gambling is the production of serotonin, which is often linked to impulsive behaviour, and noradrenaline, which is linked to arousal in the brain. It is now recognised that this will possibly stimulate opioid like peptides, introducing a drug-like high, and have the potential to alter brain pathways in many ways, including mood, reward memories, and decision making processes (Goudriaan et al., 2004). Even though there is an obvious base for a biological impact on the brain in pathological gambling, further longitudinal studies are needed to confirm this link.

Pathways Model

A pathways model, developed by Blaszycynski and Nower (2002), has acknowledged that problem gambling is multi-faceted and that specific subtypes of problem gamblers exist and that their problem gambling behaviours are driven by a range of psychological, physiological, and emotional factors and personal experiences in varying degrees. These subtypes include behaviourally conditioned problem gamblers, emotionally vulnerable problem gamblers, and antisocial, impulsive problem gamblers (Blaszczynski & Nower, 2002). The acknowledgment of the pathways model also highlighted how many problem gamblers have never exhibited signs of a premorbid psychological condition but become problem gamblers in response to the effects of conditioning and distorted cognitions surrounding probability of winning (Blaszczynski & Nower, 2002). For example, problem gambling seniors, who may not have experienced gambling issues until later life, have been examined through the pathways model. Tira, Jackson, and Tomnay (2013) identify three pathways to late-life problem gambling: a grief pathway, a habit pathway, and a dormant pathway linked to pre-existing behavioural excess or impulsivity. These pathways commonly share a theme of isolation, which has significant implications for treatment responses and suggests that social contexts that inadvertently create isolation ought to be avoided (Tira, Jackson, & Tomnay, 2013). Scrutinising the pathways model, Gupta et al., (2012) studied an adolescent population of problem gamblers and found support for the three subgroups proposed by a pathways model (Blaszczynski & Nower, 2002). He also found and added two

additional subtypes, including a depression-only subtype. Suomi, Dowling, and Jackson (2014) investigated gambling subtypes in treatment-seeking individuals, finding a 'pure' gambler subtype without other comorbidities. These 'pure' gamblers were more likely to have lower problem gambling severity and report current abstinence in treatment. A pathways model takes into consideration that accessibility and availability are strongly linked to problem gambling. For example, some societies, such as Pacific Island populations, who do not have access to gambling venues, do not have a word for gambling or gambling problems (Abbott & Volberg, 1999). In an attempt to validate the three pathways hypothesis of pathological gambling, Valleur et al. (2016) conducted a study in which 392 pathological gamblers (who met the DSM-IV criteria) were assessed. Based on structured clinical interviews, personality tests, and an overall evaluation of their gambling behaviours, the authors found that pathological gamblers could be subdivided into three subgroups: behaviourally conditioned problem gamblers, emotionally vulnerable problem gamblers, and antisocial impulsive problem gamblers. This is different to the three pathways identified by Blaszczynski and Nower (Valleur et al., 2016).

Biopsychosocial Model

In her paper 'A reformulated cognitive behavioural model of problem gambling: A biopsychosocial perspective', Sharpe (2002) formulated a theoretical concept that attempts to integrate overlapping aspects of the previously discussed theories. Based on this model, Sharpe (2002) attempted to explain why some people develop problems with gambling while others do not, given similar exposures to gambling opportunity. As with a pathways model, it presumes that the complexity of problem gambling warrants a more comprehensive model that accounts for biological, psychological, and social factors linked to the gambling behaviour. She proposed that the biopsychosocial model takes into consideration influencing factors such as poor coping and problem solving skills, past gambling incidents (e.g., large wins), and adverse biosocial experiences (e.g., loneliness, boredom, and an overall stressful life (Sharpe, 2002). She argued that all factors are most likely to interact, even though certain factors will be of greater or lesser importance for the individual experiencing gambling problems. Accepting a more comprehensive model like this has implications for further developments in research and clinical interventions.

Griffiths and Delfabbro (2001) have supported Sharpe's perspective and suggested that research and clinical interventions are best served by a biopsychosocial approach that incorporates the best strands of contemporary psychology, biology, and sociology (Griffiths & Delfabbro, 2001). Since the perceived experience of the individual can change over time, it is possible that focusing upon the self-reported factors currently maintaining the behaviour does not provide insights into the factors that led to the behaviour developing. Thus, when one takes a biopsychosocial view, it becomes possible to perceive an individual's gambling in terms of its broader social and cultural context. This approach also implies that different perspectives and approaches may be beneficial, so long as they appear to apply to the particular gambler concerned. Moreover, it signifies that a variety of treatments could be beneficial even if used simultaneously. Those treatments are based on trying to reduce harm caused by problematic gambling.

Harm Minimisation Measures

Research shows that the majority of people can gamble without causing harm to themselves and/or others. However, the expansion of gambling products, especially EGMs, came at a cost to some consumers, their families, and the community. Delfabbro and O'Neil (2005), therefore, argued that gambling harm should be seen as a community health issue. There is no agreed upon definition of gambling related harm. It is a complex issue, made more difficult by the fact that it is not easy to isolate it from co-occurring mental health conditions, like anxiety and depression (Browne et al., 2016). Nevertheless, as a consequence of identifying significant harm caused by problematic gambling, many resources have been invested into looking at measures that aim to minimise harm (Neal et al., 2005). To determine what the general community thought could be done to reduce harm, a survey was conducted in Victoria in 2003 which found that 90% of Victorians thought that there were too many EGMs in the state and wanted a reduction of the numbers (McMillen, Marshall, Ahmed, & Wenzel, 2004).

The Productivity Commission (2010) defined 'harm reduction' as a strategy that aims to minimise harm caused by excessive gambling in a manner that does not impact on those who are able to gamble without experiencing harm. This way of thinking has been adapted from other addictive behaviours in which excessive use has the potential to cause harm but the behaviour can also be performed in a responsible manner. The conflict in this approach to gambling is that there has been no safe level of gambling identified to date. Dickson et al. (2004) found that there was a high level of comorbidity between alcohol and gambling among young people. They proposed that there were three beliefs underlying this finding: the belief that gambling is a socially acceptable activity, the belief that a continuum of harm exists for gambling, and the belief that adolescent experimentation is a normal part of the development process. These findings are not just applicable to young people but are relevant across all ages, genders, and cultural differences (Dickson, Derevensky, & Gupta, 2004).

This line of thinking assumes that gambling has the potential to cause harm if it is consumed excessively. It also implies that there is a safe way to gamble responsibly and that, in treatment, abstinence is not the only outcome that will minimise harm. Therefore, harm minimisation forms one strategy of a responsible gambling approach, along with the provision of consumer protection measures, consumer education and awareness, and treatment for people experiencing gambling related harm. When community health strategy harm minimisation measures for problematic gambling were first introduced, the agenda quickly shifted to strategies that addressed the negative consequences as a result of problematic gambling (Blaszczynski, 2001). Harm minimisation measures and how effective they are is difficult to research and quantify. One of the barriers to overcome is that they need the cooperation of all stakeholders, including government and the gambling industry, to be implemented, and evaluated. To date, this has proven difficult. One public health researcher has called particular attention to this concern, alerting us also to differences of opinion within the broader public health framework (Livingstone 2018). Livingstone is also critical of responsible gambling and problem gambling terminology:

De-stigmatisation of gamblers is a critical step in the development of effective harm prevention and minimisation ... this is a priority, along with changing the language around gambling harm. The terms 'problem gambler' and 'responsible gambling' were devised by industry and serve industry purposes. In practice, they devolve responsibility for harm on to individuals, and avoid discussion of the harm producing properties of gambling forms, especially EGMs. Research, as noted above, is key to developing more effective harm prevention and minimisation measures. However, one of the effects of widespread industry involvement in gambling research agendas over many years has been that the evidence base for gambling harm and interventions to address it has been under-developed, and is in many crucial areas of poor quality (Cassidy et al., 2013).

Applying a public health framework when addressing the issue of problem gambling and prevention of gambling related harm needs a three dimensional approach to prevent harm, rather than just focusing on individual treatment initiatives. The public health perspective aims to address three dimensions of prevention or intervention: primary prevention, secondary prevention, and tertiary intervention (Dickson-Gillespie et al., 2008).



Figure 4. Public health perspective on gambling and gambling related problems. Adapted from Gambling and the health of the public: Adopting a public health perspective by D. A. Korn & H. J. Shaffer, 1999, Journal of Gambling Studies, 15(4), 330.

Applying this framework, involving primary, secondary, and tertiary measures presumes that there is no single intervention that will deliver a successful public health outcome and reduce the prevalence of problematic gambling behaviour. Therefore, it needs to utilise comprehensive effective practices that have resulted in successful outcomes for other health issues. For example, in 1950 three quarters of Australian men smoked. Due to a successful anti-smoking campaign now, almost 70 years later, less than one in five men smoke. Similar results are reported in reducing road trauma and death from SIDS, just to name a few (Browne et al., 2016). The next chapter will outline in more detail the main primary, secondary, and tertiary options available in Victoria to reduce gambling harm and prevent relapse.

CHAPTER IV

Problem Gambling Interventions

This chapter will examine problem gambling interventions – principally in Victoria, Australia – through the lens of the three dimensional 'primary-secondary-tertiary' approach articulated in the previous chapter. Three main categories of interventions are used in Australia: (1) primary interventions, which aim to prevent problem gambling; (2) secondary interventions, which aim to minimise the harm caused by those who already have developed gambling problems; and (3) tertiary interventions, which aim to support the individual and others (e.g. family members) who are indirectly affected by problematic gambling behaviour.

Primary prevention strategies, which aim to protect people from developing gambling problems, include:

- Education about characteristics and potential hazards of gambling products
- Education efforts aimed at maximising financial literacy in young people
- Limits on types and location of venues relative to regional characteristics

Primary prevention campaigns involve dispelling myths about luck and chance and educating young people about the odds of winning. Young people are the main target group for those primary interventions (Dowling et al., 2010), but no long term studies have been conducted to evaluate the effectiveness of those campaigns. Another primary prevention measure involves local governments trying pro-actively to limit the expansion of gaming venues in their areas, especially in lower socioeconomic areas. This measure is also supported by the Victorian government through regional caps on poker machine numbers. However, again, it is difficult to evaluate the effectiveness of those measures. To date, there is not enough literature supporting the effectiveness of primary campaigns, especially literature showing how those measures are able to reduce the prevalence of problem gambling (Gray, Browne, & Prabhu, 2007). Secondary prevention aims to reduce the potential for problems to start and then to contain the impact of gambling once the behaviour has begun. Examples of secondary prevention measures include:

- Modifications to gambling environments
- Modification of machine design characteristics
- Restricting access to cash in venues

Secondary prevention initiatives have included, machine modification (e.g., reducing bet limit and slowing down speed rates), removing Automated Teller Machines (ATMs) from venues, and implementing changes to the gambling environment (e.g., by regulating light level and access to clocks). Removing ATMs has been an effective harm minimisation measure in Victoria. Anna Thomas et al. (2013) evaluated the effectiveness of this measure, and the findings were positive. Since ATM removal, high risk gamblers have spent less time and money on EGMs. High risk gamblers reported increased control over their spending, leading to a reduction in revenue in gambling venues (A. Thomas et al., 2013). Staff training, self-exclusion programs, and advertising campaigns promoting help services are also initiatives aimed at preventing harm and reducing the harm already present. The efficacy of those measures has not been proven, especially as many of those have been met with reluctance from the industry which needs to implement them (Williams, Volberg, & Stevens, 2012). Another secondary measure, one with a broader public health intention, should also be mentioned. In 2002, Victoria introduced a ban on smoking while using EGMs. This measure was effective in reducing losses. The Victorian data depicted in Figures 2 and 3 show a noticeable drop from 2002.

Tertiary prevention measures applying this public health framework, are intended to reduce the severity of existing problems and to prevent relapse. These include the provision of counselling services and effective referral processes to treatment. Examples include:

- Effective referral to specialist treatment and counselling services by venue staff and primary health care providers
- Provision of counselling services
- Provision of follow-up services to prevent or deal with relapse

In Victoria this involves developing and facilitating various harm minimisation measures that focus on the individual, their communities, the gambling environment, and the treatment providers (Browne et al., 2016). Only 10% of people who are suffering gambling related harm in Victoria were proactively seeking help and getting treatment (Productivity Commission, 2010). As discussed in the previous chapter, there are a number of empirically supported theories of problematic gambling which have been used to inform the development of various interventions. To date, however, no single treatment satisfies the current standard for evidence of efficacy (Westphal, 2007).

The guidelines developed in 2010-2011 by the Problem Gambling Research and Treatment Centre (PGRTC) for the treatment of problem gambling attempted to collate empirical evidence for the therapeutic interventions that work best. The guidelines recommended Cognitive behaviour Therapy (CBT) as best practice for problem gambling (Problem Gambling Research and Treatment Centre, 2011). The following sections provide a detailed overview of interventions in Victoria, and Australia more broadly, which are designed to assist problem gamblers and reduce the harm caused by problematic gambling behaviour.

Primary Interventions

School education program. In Australia, a number of programs have been trialled with the aim of preventing problem gambling from occurring. School education programs educate children and young adults about the potential harm that gambling can cause. As stated in their service agreement with the government, all of Victoria's Gambler's Help

services are encouraged to get qualified community educators into schools to teach young people aged 15-16 years the potential harm that problematic gambling could cause. Embedding this topic into the general curriculum is problematic, however, because of the increasing demands on schools to provide time for extra-curricular subjects (e.g., drug and alcohol education). In 2004, some educational material was trialled in over 12 pilot schools, with the evaluation showing that students found it difficult to understand the difference between gambling and other risk taking behaviours (Delfabbro et al., 2011).

Public awareness raising campaigns.Many campaigns have been run in mainstream media and in gambling venues with the aim of providing the general public with responsible gambling messages. The key messages were designed for a specific target audience, for example, young males, females, pensioners etc. The evaluation done by Jackson et. al. (2000) of one of those campaigns showed a significant change in awareness of the general public in regard to 'help services' and their availability (Jackson, Thomas, Thomason, Holt, & McCormack, 2000).

Responsible gambling messages in gambling venues. '*Gamble responsibly* and other warning messages have been displayed around venues in Australia over many years. Although they are thought to be important, the Productivity Commission could not find enough evidence regarding their effectiveness to prevent problem gambling or increase helpseeking behaviour (Productivity Commission, 2010).

Secondary Interventions

These interventions aim to minimise the harm that people experience who have already developed a gambling problem. In the Australasian Gambling Review 5th edition (2011), Delfabbro breaks it down into five general forms of secondary intervention strategies:

Removal of *Automated Teller Machines* (ATMs) from gaming venues. This intervention was designed to restrict people's access to money at gambling venues. It is well

known that ATMs and EFTPOS gives people access to cash that they might and/or might not want to spend on gambling. Tasmania is the only state that prohibits ATMs and/or EFTPOS machines in gaming venues. All other states have placed limits on the amount of cash that can be withdrawn at the venue and/or have replaced ATMs with EFTPOS machines. The reasoning behind the switch from ATMs to EFTPOS machines was that, to withdraw money, the person actually had to deal with a staff member. This was thought to provide a personal barrier for a customer to keep withdrawing money continuously. In all states of Australia, ATMs and/or EFTPOS machines are not allowed to be located within the actual gaming room, but they can be placed outside.

Shutdown of machines in gaming venues for four to six hours. Another initiative was to enforce a four to six hour shutdown of machines in gaming venues. A study by Tuffin and Parr in 2008 about the effectiveness of this measure found that the shutdown did have a greater effect on problem gamblers than on other players. It definitely shortened the time that they would have otherwise gambled and consequently reduced the amount of money that they would have otherwise lost (Tuffin & Parr, 2008).

Modification of gambling products especially EGMs. The Productivity Commission reports (1999, 2010) recommended modification of EGMs aimed at reducing harm caused by this gambling product. The modifications that were suggested included reducing the maximum bet to one dollar, reducing the number of lines on an EGM, banning note acceptors, and slowing down the speed of an EGM. Even though some studies generally found those measures would be welcomed by regular players, it is hard to rate if they would alter a problem gambler's behaviour or if they would just modify their playing behaviour (Rodda & Cowie, 2005). The Productivity Commission (2010, e.g. Table 11.2) did, however, demonstrate that such modifications would reduce potential losses dramatically, from an average \$1,200 per hour with a \$10 bet limit to an average of about \$120 per hour with a \$1 limit.

Pre-commitment smart-card technology. Another innovative measure suggested by the Productivity Commission (1999) was the introduction of pre-commitment smart-card technology (Productivity Commission, 1999). The aim of this measure was that players would be able to set a limit on the amount of money that they are prepared to lose during any one session. Once the self-assessed limit was reached, the machine would stop and alert the player. The fact that this option is voluntary is important to note, because it gives the player the choice to override the suggestion to stop playing once the limit is reached. Since 2016, all venues in Victoria offer players the option of signing up to this voluntary pre-commitment scheme. The uptake has been minimal (Thomas et. al, 2016).

Self-exclusion. Self-exclusion as a harm minimisation measure is designed to support problem gamblers who self-identified as not being able to restrict the amount of money and time that they spend in the gambling venue. Individuals who have voluntarily acknowledged that they have a problem with their gambling can enter an agreement with the venue/operator to exclude them from their premises, including online facilities. Even though the main responsibility is largely with an individual, a venue/operator can actually perform the exclusion in some jurisdictions and must accept some responsibility to enforce the exclusion. While self-exclusion is available in all jurisdictions, it has been legislated for casinos in all jurisdictions except the Northern Territory (which covers this subject through the Mandatory Code of Practice). New South Wales, Queensland, South Australia, and Tasmania have all legislated self-exclusion for clubs and hotels, with the other jurisdictions using either selfregulatory (Victoria, Tasmania, Western Australia) or mandatory codes (Australian Capital Territory) to implement self-exclusion measures. In 2003, the SA Centre for Economic Studies completed an evaluation of self-exclusion programs and other harm minimisation measures for all states and territories. One study found that between 0.4% and 1.5% of problem gamblers utilise self-exclusion (O'Neil et al., 2003).

Self-exclusion is not a therapeutic intervention. It simply provides a barrier to accessing gaming venues and does not replace clinical counselling. There are a number of studies which show that many people who self-excluded have breached the contract and returned to gambling venues (Gainsbury, 2014; Ladouceur, Sylvain, & Gosselin, 2007; Williams et al., 2012). Williams et al. (2012) and Gainsbury (2014) note that there is evidence that self-exclusion has some benefits for some people but, because of the lack of an electronic monitoring system, thereby relying on staff to identify people from photographs, it is far from reliable. Along the same lines, it is possible to enter an online self-exclusion program. There are specific software filtering products available for purchase which can block a person's access to gambling sites on desktop and mobile devices. Depending on the type of gambling, these products may offer additional protection, as they are able to block access to international websites which are not under Australian regulation.

Staff interventions. This measure involves staff members in a gaming venue providing assistance for those who might show signs of distress due to gambling related harm. As discussed previously, the gambling regulation in Victoria prescribed for gambling operators to work according to a set of principles that support people to gamble responsibly. The content of those (either voluntary or mandatory) codes of practices varies, but most, if not all, include staff training in responsible gambling practice. The training involves teaching staff how to recognise signs of distress in customers, how to approach the person, and then how to assist those patrons who are displaying signs of distress. Staff are taught how to refer customers to counselling services and/or to the self-exclusion program. They also learn about the responsible serving of alcohol to gambling patrons and the payout options for large wins. In Victoria, all Gambler's Help services have a staff member (i.e., a 'venue support worker'),

specifically employed to liaise with EGM gambling venue managers and conduct training for all gambling venues employees.

Formal Tertiary Interventions

These interventions have been developed to support problem gamblers when they self-identify as having a problem with gambling and are proactively seeking help from recognised services and/or qualified professionals. Despite the various negative consequences that are associated with problem gambling, few problem and at-risk gamblers seek help and treatment (Gainsbury, Hing, & Suhonen, 2014). As mentioned before, problem gamblers often face gambling comorbidities including depression, anxiety, and substance abuse, which also influences the help-seeking behaviour of these individuals (Productivity Commission, 2010). A significantly large barrier to recruit individuals for treatment is the stigma that surrounds problem gambling. In a study conducted by Miller and Thomas (2018), 26 participants were interviewed on the effectiveness of formal tertiary initiatives in Victoria. One of the questions asked related to the common and often used phrase 'responsible gambling' in most of the formal tertiary initiatives such as posters, brochures, and other communication tools. They found that those initiatives promoting responsible gambling had hardly any impact on participants' gambling behaviours and, instead, that these initiatives seem to increase rather than decrease gambling related harm.

It is estimated that around only 10-15% of problem gamblers actually seek treatment (Evans & Delfabbro, 2005; Productivity Commission, 2010; Suurvali, Cordingley, Hodgins, & Cunningham, 2009). The barriers most commonly reported were issues with the treatment method itself, shame/stigma, unwillingness to admit to the reality of a problem, secrecy from significant others, and wanting to handle the problems oneself. Hing et al. (2011, 2016) also examined the main motivators for seeking professional treatment, finding that the proliferation of serious financial, relationship, and emotional issues triggered help seeking (Hing et al., 2017; Hing, Nuske, & Gainsbury, 2012). Gainsbury et al. (2014) also highlighted that there is a low awareness of professional help services among gamblers. Gamblers who gambled in Australia but were born outside of Australia were less likely to seek help, and concerns exist around the ability to access a low cost service catering to multicultural populations (Gainsbury et al., 2014). In a Victorian Prevalence Study (2014), the gambling participation rate of Victorians was 61.6%, with a problem gambling rate of 0.8%, and an additional 2.8% falling into the moderate at-risk category. Both groups self-reported anxiety and depression, but help seeking in those surveyed was very low. The following sections discuss various formal treatments available in Australia as well as some strategies that problem gamblers can access for themselves (self-help).

Cognitive Behavioural Therapy (CBT). In the Screening, Assessment and Treatment Guidelines in Problem and Pathological Gambling (2010), CBT is recommended as the preferred treatment option. CBT uses both cognitive and behavioural techniques to support people identified as having a gambling problem. Cognitive interventions include helping people to identify misperceptions, for example false beliefs about winning and the odds. Within CBT treatment, a mental health professional can assist a problem gambler to break down the thought processes that set an addiction trajectory to the compulsive gambling practice. The road to recovery begins when the root causes of those misperceptions for the individual have been found and addressed. The other component of CBT is the behavioural part of the intervention. This can include exposure techniques, systematic desensitisation, behavioural counselling, financial planning, alternative activity planning, and goal setting (McConaghy, Blaszczynski, & Frankova, 1991). CBT has also been applied and evaluated in group settings (Blaszczynski, 2001; Dowling et al., 2008) and in some overseas residential settings (Ladouceur et al., 2006). A recent Cochrane review (Cowlishaw, Merkouris, Chapman, & Radermacher, 2014) covering CBT, motivational interviewing therapy, integrative therapy, and other psychological therapies found that CBT provided flow-on benefits in the period immediately following treatment. However, there is less evidence for the lasting effects of CBT.

In another very comprehensive study, Petry et al. (2006) evaluated the effectiveness of using a CBT workbook as well as attending regular Gamblers Anonymous (GA) meetings against a group who just attended GA meetings. The same study also compared a group who attended regular GA meetings as well as using a CBT workbook with a group who attended regular GA meetings as well as receiving eight CBT therapy sessions. Data was collected at baseline, after baseline, 1 month later, post-treatment, and at 6- and 12-month follow-ups. It showed that attending regular GA plus using a CBT workbook and attending regular GA meetings plus the eight CBT therapy sessions was more successful in reducing problem gambling than a GA referral alone at the 12-month follow-up evaluation (Petry et al., 2006).

Brief interventions. Brief interventions, including motivational interviewing, telephone, and Internet-based support have demonstrated their clinical usefulness and are suitable for people who require low-intensity interventions (Abbott et al., 2013; Hodgins, Currie, Currie, & Fick, 2009; Hodgins, Currie, el-Guebaly, & Diskin, 2007; Petry, Weinstock, Ledgerwood, & Morasco, 2008). Brief interventions involve less time and resources than traditional interventions (Heather, 1989). They also offer an option for people who need help but live in remote geographical areas where these interventions can be offered via telephone or Internet.

Motivational enhancement is a brief low-intensity treatment that typically involves using a self-help workbook and some limited interaction between a client and a therapist (Abbott et al., 2013). The features of this treatment make it a suitable tool for use in telephone helplines. As with brief interventions, they are able to be accessed by people living in small, rural, and isolated communities where treatment opportunities are scarce (Hodgins et al., 2009). Abbott et al., (2013) also examined the effectiveness of problem gambling brief telephone interventions, finding that participants demonstrated similar overall improvements, irrespective of background and sociodemographic experiences. Engagement with additional treatment was not found to improve treatment outcomes significantly. This suggests that those who seek additional treatment obtain it and benefit, while those who do not perceive a need do not require it (Abbott et al., 2013).

Financial counselling. Financial counselling includes debt management, asset protection, and budget strategies, and is an important intervention available free of charge in Australia. To call this intervention financial counselling may be seen as misleading because there is no therapeutic technique involved. Nevertheless, it is very often the first port of call for consumers who are affected by problem gambling. This is generally in relation to a crisis response to no food, no petrol, no money for children's school activities etc. While financial counsellors may be able to respond in an immediate way to the consumer to relieve some of the pressure it is important to facilitate links to other treatment services to address the issue of problem gambling. People with significant debt may present to a financial counsellor due to creditor harassment. Financial advice for people experiencing financial difficulties related to problematic gambling has to be structurally different from advice given to people who experiencing financial hardship due to bad business decisions. To support a client who has made bad business decisions and needs advice on how to reduce debt, the financial counsellor will firstly look at freeing up cash. On the other hand, if a client is in financial difficulties because of a gambling problem, the discussion around debt management needs to take into consideration that freed up cash could contribute to the person's decision to continue the destructive behaviour. Other advice options need to be considered, and financial difficulties can be the easiest problem to solve of the clients' many other problems related to gambling. Another area that financial counsellors can assist with relates to asset protection. This is

important, not just for the client but their family. It is often difficult to work with a person addicted to gambling because they are not entirely able to avoid the one thing that feeds their habit, which is money. A person addicted to drugs can avoid illegal drugs, people who have problems with alcohol can stay away from alcohol, but a person who has a problem with gambling cannot avoid banks, cash registers and, in general, they cannot avoid dealing with money on a daily basis. If there is a partner, children, and other people affected by the person's problem with gambling, the aim of the financial counsellor is to help the person to relearn how to manage their money to regain financial stability and to protect the assets of their family and friends. The problem gambling financial counsellor would explore what financial assets the client has left that they can potentially turn into cash for gambling. They explain ways that those assets can be protected, and how the possible risk of losing an asset (e.g., house or car) can be prevented. After the financial counsellor has identified sources of income and assets and assessed the client's ability to follow a strict plan, the counsellor will attempt to develop a realistic budget to direct money to where it is needed most and, more importantly, protect the client from piling up more debts. Relieving the debt burden can help to reduce the person's anxiety and guilt. Even though the aim for the counsellor is to support the client in paying off their debt quickly, he or she will advise against borrowing it from family and friends. Such a 'quick-fix' could lead a person to consider gambling again because the financial pressure is off (Pentland & Drosten, 1996).

Pharmacological intervention. In Australia, help professionals and researchers generally prefer psychoeducational and/or psychosocial interventions to treat problem gambling, although pharmacological treatments for problem gambling have been used for some time. A review of pharmacological approaches in gambling interventions captured studies where prescribing a pharmaceutical was the sole form of intervention (Westphal, 2008). All of the pharmacological studies reviewed used the existing Diagnostic and Statistical Manual of Mental Disorders (4th ed. [DSM-IV]; American Psychiatric Association, 2008) definitions of pathological gambling. Several types of medication could potentially be effective. For example, selective serotonin reuptake inhibitor (SSRI) antidepressants and opioid receptor antagonists (for example naltrexone) have shown some good results (Brewer, Grant, & Potenza, 2008). However, as pathological gambling is associated with a range of co-occurring disorders, the medication may just be mitigating the co-occurring disorder (Westphal, 2008). In South Australia, Forbes, Battersby, Baigent, Pols, Harvey, Oaks, and Edmonds (2010) conducted a small study using the opioid receptor antagonist Naltrexone to treat a small group of problem gamblers. The findings did not provide significant evidence that the drug reduced urges to gamble and/or modified gambling behaviour with participating clients (Forbes et al., 2010). The Problem Gambling Screening Assessment and Treatment guidelines (2010) reviewed evidence-based best-practice interventions for problem gambling, but found that there was insufficient evidence to recommend pharmacological treatment.

Hypnotherapy. Hypnotherapy induces a state of deep relaxation which makes it easier for a hypnotherapist to access a client's subconscious mind. By digging deeper into a client's subconscious, a hypnotherapist can explore the routes of certain behavioural patterns and, by using the power of suggestion, help the client to break out of these patterns. By altering their thought processes and learning to channel their emotions in different ways, an addict can learn to overcome their gambling addiction and also learn techniques to keep them going, even when their hypnotherapy sessions are over (Lloret, Montesinos, & Capafons, 2014). Lloret, et al., (2014) conducted a study of 49 participants who were divided into two groups. Group 1 received 11 sessions using cognitive behavioural therapy and Group 2 received seven sessions, which included self-hypnosis. The findings suggest that selfhypnosis could be a supportive strategy in conjunction with other brief interventions (Lloret et al., 2014). Self-help interventions. A reality which challenges the disease model of addiction is that many people who at some stage in their lives face behavioural and/or substance use addictions recover from these without any form of formal clinical treatment (Heyman, 2013). The same is true for people who suffer gambling related harm. Slutske (2006) stated that pathological gambling does not always have a chronic and persistent trajectory and that a large percentage of problem gamblers will recover without requiring a formal intervention. Self-help interventions are those treatments which do not require professional time and resources. For many people struggling with problematic gambling behaviour they provide a non-threatening, cost effective alternative to the traditional one-to-one counselling service. They include cognitive behavioural self-help workbooks, other written material, and Internet based treatments. These very often include strategies to reduce the urge to gamble and have some benefits, but self-help is often more effective in combination with one-to-one counselling facilitated by a clinician (Rash & Petry, 2014).

Hodgins & El-Guebaly (2000) compared resolved and active gamblers and the rates of how natural and formal treatment assisted recovery within these groups. Those with more severe problems were more likely to have self-help involvement or treatment, whereas the ones who naturally recovered generally had much less severe problems to start with. Alternative approaches, such as Buddhist-derived mindfulness techniques, have been noted to be suitable as an intervention for problem gambling (Chen, Jindani, Perry, & Turner, 2014). However, the long-term impact of mindfulness is yet to be examined. There is a growing interest in other Buddhist-derived practices, such as insight meditation techniques. However, this has been impeded by an absence of controlled treatment studies and a deficiency of suitably experienced clinicians (Shonin, Van Gordon, & Griffiths, 2013).

A resource specifically aimed at preventing problems with gambling was developed in Victoria by the North East Primary Care Partnership in collaboration with other local organisations. *The Social Outings Guide: Do not Gamble with your Group* aimed at social, senior, and ethnic groups to offer and promote affordable and suitable non-gambling outing options. The efficacy of this resource has not been evaluated, but the low cost and easy access could make it an attractive self-help option as well as an add-on to therapeutic counselling.

Support services for significant others. Evidence shows that problematic gambling not only affects the individual but also significantly impacts other people. A typical problem gambler affects six other people (Goodwin et al., 2017). Research to date has mainly focused on partners and children of people with gambling problems (Hing, Tiyce, Holdsworth, & Nuske, 2013). The effects on significant others include: relationship breakdown, financial, emotional, physical, work, and study effects and criminal activity (Langham et al., 2015).

There are many reasons why significant others of individuals with problematic gambling behaviour seek help. The main one that has been identified is financial stress caused by problematic gambling behaviour by a significant other. Therapeutic counselling for significant others is available free of charge at Gambler's Help services around Victoria/Australia. Other services specifically designed to support significant others are phone counselling and e-therapy. Rodda, Lubman and Dowling (2017) conducted a study involving 62 family members of people displaying problematic gambling behaviour. All 62 participants were recruited from a Gambling Help Online service. The findings of this study highlighted that significant harm was experienced on many levels by all who participated in the study. The reasons for accessing help could be grouped into four categories. The first one was that they wanted to find out more about gambling; secondly, they wanted to know how to approach the person with the problem; thirdly, they wanted to know how they could encourage the person to seek help; and the fourth reason was that they wanted to know what they could do to support the recovery of the person who suffered from gambling related harm (Rodda, Lubman, & Dowling, 2017). Even though this research suggested that e-therapy delivered positive outcomes for the participants, it also highlighted that a greater variety of programs needed to be developed and their effectiveness evaluated to support significant others better in the longer term across all areas of need.

Peer Support Programs

Peer-based recovery support groups are evidence that the provision of care for people with addictions is changing from a pathology approach to a more long term recovery paradigm (White, 2009). It is defined as giving non-professional assistance to people who struggle to achieve long-term recovery. Peer support groups have high value in complementing professional treatment or as an alternative to formal interventions (Binde, 2012a). Boisvert, Martin, Grosek and Clarie (2008) examined the impact of a peer support group in addiction recovery, finding that those who participated in a group intervention experienced a major reduction in the risk of relapse and improvements in perceived social inclusion and supportive behaviours. As part of the *Study of gambling in Victoria: Problem gambling from a public health perspective* (Hare, 2009), problem and moderate at risk gamblers rated the usefulness of engaging in various recreational activities instead of gambling as important in reducing their rate of gambling. Having more leisure interests and having a wider social network were perceived to be the most useful strategies.

The 'helper therapy principle', meaning how the person offering support is affected (Riessman, 1965), and reciprocal learning may be more effective than the emotional support given (Magura, Laudet, Mahmood, Rosenblum, & Knight, 2002). Luks (1988) outlined the 'helper's high', in which those who volunteered or helped others reported better general health outcomes compared to those in a similar age group who did not volunteer regularly. A defining element of a peer support group is that members are deeply engaged in helping each other but are also driven to participate by a deep concern for their own healing. These groups

see the value in people who have experienced the problem directly, as they foster more empathy and more self-disclosure (Luks, 1988; Magura et al., 2002). Peer support services can exist in different formats, including group programs (for example Gambler's Anonymous), individual programs (telephone support services, chat rooms), and various other online programs. All of these approaches have demonstrated their effectiveness in assisting some problem gamblers to reduce or abstain from gambling. As mentioned previously it is recognised that no single form of intervention is able to meet the needs of all people experiencing gambling related harm. There is also evidence that, depending on the stage of recovery a person is in, different therapeutic interventions need to be applied (Contole, Sundbery, & Weir, 2015).

The local societies of Sweden's National Association of Gambling Addicts Peer Support Approach enabled individuals to share narratives about their gambling problems. These narratives were structured to a certain template that, in turn, guided the recovery process. Additional support services included counselling and encouraged the participants to attend social events and to utilise a drop-in centre, which was available to everyone. Regular attendance of clients of those group events offered a valuable alternative or complemented professional treatment for young people, adults, and support for concerned significant others (Binde, 2012b).

For recovering problem gamblers, a peer support approach to relapse prevention and treatment is especially relevant, as these individuals are often left with few social activities other than their treatment or the options to gamble (Jackson et al., 2012). Peer support programs are recognised as having a positive impact on the general health of individuals. Hoey, Ieropoli, White and Jefford (2008) undertook a review of peer support programs for those facing cancer, finding that peer support contributed to the feeling of wellbeing, encouraged healthy behaviours, and reduced isolation and feelings of depression and anxiety.

Another component of the peer support model was that it embedded improved coping skills and behaviours so that feelings of stress were mitigated more effectively than if peer support was absent (Hoey, Ieropoli, White, & Jefford, 2008). Another review of peer support programs, focused specifically on diabetes programs in New Zealand, found that these programs helped individuals to overcome various psychological and motivational barriers to diabetes self-care (Simmons, Unwin, & Griffin, 2010). Peer support programs can be a beneficial factor in a person's recovery and can be utilised especially when professional support is not available and/or when working with disadvantaged communities for which resources and professional staff are scarce (Simmons et al., 2010). The following sections will discuss a few of the most popular group interventions available in Australia.

Gamblers Anonymous (GA). One of the most popular peer support programs is Gamblers Anonymous (GA). GA is the primary example of a group peer support program and is entirely run by volunteers. GA is a 12-step group program which uses the same principles as Alcoholics Anonymous (AA). The problem gambler is encouraged to engage actively in the 12-step program and to attend as many meetings as possible, especially in the beginning. The goal of the GA is for the person to achieve complete abstinence from gambling. A key part of a 12-step program is choosing a sponsor. A sponsor is a former problem gambler who is willing to offer time and experience to someone still struggling with problematic gambling behaviour. The sponsor needs to have been abstinent from gambling for a lengthy period of time.

Gam-Anon is a peer support group for significant others (e.g., family members, partners, friends, work colleagues, etc.) of the person who has a problem with gambling. Oei & Gordon (2008) have suggested that successful GA members, measured by the ability to stop gambling and to maintain abstinence over a period of time, are members who attended regular meetings as well as having significant support from family and friends.

Referrals to GA are usually recommended by professionals as an adjunct to CBT or other clinical treatment. The combination of treatment and attending GA group session has demonstrated its effectiveness (Ferentzy & Skinner, 2003). A combination of CBT and GA attendance was shown to enhance therapy engagement and reduced the rates of relapse (Petry, 2005a). Many people who have written about their experience with GA have been very positive and stated that it is an important medium because of all the help that is available (Bellringer, 1999; McCown & Chamberlain, 2000). GA has been found to be very effective for supporting those who have relapsed and improving several wellbeing measures, even for those who did not achieve GA's goal of abstinence (Ferentzy & Skinner, 2003). However, long term follow-up studies of those who attended GA suggested that dropout rates were high and abstinence rates were low (Stewart & Brown, 1988). While, for many people, even at the time this thesis was written, GA was the most common form of intervention, evaluative studies about the effectiveness of the program are limited (Oei & Gordon, 2008; Stewart & Brown, 1988).

Peer Connection Program (PCP). The Peer Connection Program (PCP) is run by a Gambler's Help Service in Victoria. Gambler's Help services are government funded agencies that provide a range of therapeutic interventions. While the PCP is a statewide service, it operates out of a Gambler's Help service in northern metropolitan Melbourne, Victoria. This peer support program is specifically designed to operate as an adjunct to the professional counselling service run by all of the Gambler's Help services. Peer Connection operates from a peer-partnership model as defined by Solomon (2004). Peer partnerships are characterised by financial responsibility lying with a non-peer organisation and the administration and the governance of the program being shared mutually between peers and professionals. Peer partnership is a model of peer support common in the field of mental health and health care in Victoria/Australia. In this model, peer volunteers are integrated into

the provision of professional support services aimed at meeting the emotional, instrumental, and information needs of service users. As such, these services are underpinned by a broad range of principles, such as empowerment through mutual support, identification, self-help, and reciprocal learning through the sharing of experiential knowledge (Solomon, 2004).

The PCP was modelled on an existing peer support program in Victoria called Cancer Connect established to support cancer patients. Once registered, individuals were contacted by peers at a time of mutual convenience. To enable a building of relationships, the model encourages support to be provided by the same peer volunteer over time. The explicit aim of the PCP is to provide a non-crisis, confidential telephone-based peer support service across Victoria to those who have recognised their own problem gambling behaviour as well as providing a service to affected family members. The primary value of the PCP was seen as offering problem gamblers, or their partners/family members, the option of talking to someone who had been there and who could relate directly to what the caller was experiencing in their state of recovery (Smith, 2008).

The Chinese Peer Connect Program (CPCP) operates on the same principles as the PCP. It is also a confidential, anonymous, telephone peer support program only available in Victoria. This program was developed to service the Chinese problem gambling community and their families. Like the PCP program, this peer connection program is recommended as an add-on service to therapeutic, financial counselling, or group work. It has proven to be beneficial for clients going through the transition of life after gambling and lost connection to their own community. Similarly to the PCP, volunteers are selected for their personal experience with problem gambling, either their own or a family member's experience. They have worked through their own issues related to gambling and have been assessed for their suitability to offer support to others. All the volunteers of the CPCP are fluent in the Chinese language, with many of them being bilingual.

The Self-Management and Recovery Training (SMART Recovery). SMART

Recovery is another peer support model template which was developed by an international non-profit organisation and is available to mutual aid organisations and open to people with any type of addiction, not just gambling (Contole et al., 2015). It utilises face-to-face group meetings and online resources to deliver educational sessions. The material taught during those sessions is based on CBT principles. Being based on proven psychological approaches has meant that SMART Recovery has been received favourably. However, further investigation is required to determine its long-term effectiveness for problem gambling and other addictions. The point of difference to other group interventions is that the psychoeducational sessions are facilitated by a person with lived experience of addiction and not by a professional counsellor.

Having looked at the literature describing primary, secondary, and tertiary interventions available in Australia, it is obvious that a lot of work, research, and resources have been invested into treating the individual experiencing gambling related harm. One of the challenges that all treatment evaluation faces is to establish if the intervention produces long lasting success. There are not many studies that evaluate how effective those interventions are in the long term and whether those interventions can maintain the changed behaviour achieved in therapy. In other words, it is unclear whether those interventions are enough to help a person to achieve their goal, be it abstinence or control over the problematic gambling behaviour. The next section looks at what is known about problem gambling relapse and relapse prevention.

Problem Gambling Relapse and Relapse Prevention

It is known that problem gambling is characterised by high relapse rates, with figures as high as 75% being cited (Hodgins et al., 2007). However, current understanding of problem gambling relapse is rather limited, with barriers ranging from the lack of a standard definition for relapse to the scarcity of research that focuses specifically on this area (Hodgins et al., 2007). Nonetheless, relapse is generally regarded as "the resumption of symptoms or problematic behaviour after a period of their absence or improvement" (Oakes et al., 2012). Quite a few studies in Australia have evaluated treatment success in the short term, but to date very little has been done to find out why such a high percentage of people are not able to maintain the changed behaviour in the long term.

Prochaska and DiClemente's (1983) transtheoretical model of relapse across all addictions positioned relapse as an expected part of an individual's attempts to maintain long term behavioural changes. In fact, under this model, relapses are considered as potentially helpful for strengthening the individual's resolve to change. People who relapse have been found to use action and maintenance processes to prevent themselves from continuous relapse, as they learn from their mistakes and continue to implement changes until they reach their goal of either abstinence or controlled gambling (Prochaska & DiClemente, 1983). This perspective is therefore useful for preventing recovering gamblers from feeling disempowered by setbacks or from giving up on their goals. In addition, Ledgerwood and Petry (2006) suggest that the similar substance abuse framework of differentiating between a 'lapse' and 'relapse' should be employed in the study of problem gambling relapses. In this way, isolated incidents of deviation from one's goals are separated from genuine loss of control and a prolonged period of gambling behaviour (Ledgerwood & Petry, 2006). The implication of differentiating between a lapse and relapse is that gambling abstinence may represent merely the initial phase of recovery, so that gambling behaviours post-treatment may indicate incomplete treatment, rather than total treatment failure (Ledgerwood & Petry, 2006; Oakes et al., 2010). There are many reasons why people relapse, with disengagement from other activities and social isolation being among the main factors contributing to relapse. The next two sections will look at literature that specifically investigates leisure
substitution and social connectedness in the context of problematic gambling behaviour and recovery. Recall the centrality of these concepts to the aims of this thesis, which bear repeating:

- Evaluate the effectiveness of an innovative model addressing two identified risk factors for relapse (lack of social connections and lack of leisure substitution⁴). This model specifically targeted the maintenance phase of the 'stages of change model' (Prochaska & DiClemente, 1983) in relation to drug and alcohol recovery, which is discussed further in Chapter V.
- 2. Attempt to discern if there is a relationship between this theory-driven program and any actual reduction in problem gambling behaviour.
- Investigate if this program also contributed to changes in participants' overall wellbeing, for example the reduction of social isolation, improved social connectedness and better mental health.

Leisure substitution. The literature suggests that problem gamblers may tend to engage in few social activities apart from gambling. They often consider that gambling is the only pleasurable activity in which they participate (Oakes et al., 2012), and they have minimal social contact with others (Petry et al., 2005). This may be due to a lack, or loss, of interest in other activities and/or the perception that gambling is the most appealing form of entertainment. Absolute devotion may be given to gambling related activities, so that nothing else seems to matter (Bergh & Kühlhorn, 1994; Jackson, Thomason, & Ryan, 1997; Petry, 2005b). Consequently, upon cessation of gambling, they need to find something else to do that will provide them with a similar social and emotional experience (Hodgins & El-Guebaly, 2000; Walters, 1994; Wood & Griffiths, 2007). As problem gamblers often gamble

⁴ As per the preceding section, applications of this model have had different program names: 2010 '(Re)Making Meaning'; 2012 'MoreConnect1'; 2014 'MoreConnect2', and 2015 'Dare To Connect north west'.

to escape from personal problems, having a structured and supportive program could help to minimise the risk of relapsing in situations of vulnerability, such as stressful times, exposure to gambling cues, and/or ambivalence towards personal goals (Tavares, Zilberman ML, & el-Guebaly, 2003; Wood & Griffiths, 2007). Without such support at hand, people in recovery may paradoxically be tempted to use gambling as a way to escape from gambling (Anderson, Dobbie, & Reith, 2009). Conversely, having structures can also help to occupy people during moments of optimism about winning, which has been found to precede major relapses (Wood & Griffiths, 2007). Accordingly, activity scheduling could help to ensure that people in recovery are engaged in the establishment of productive habits and that they are provided with opportunities to practice social skills and build new social networks outside of the gambling context (Hodgins & el-Guebaly, 2004; Walters, 1994). Such alternatives may encourage recovering individuals to let new things enter their lives, remake meaning out of them, and change their social identities.

Activity scheduling interventions also involve teaching participants to monitor their mood and daily activities, as well as identifying ways to enhance pleasant activities to promote positive interactions with their environments (Petry, 2005b). Despite being a deceptively simple technique, this approach has been found to be effective in the treatment of depression, as well as a range of other disorders, and is generally considered as simple to apply (Cuijpers, van Straten, & Warmerdam, 2007; Lejuez, Hopko, & Hopko, 2001). Its benefits have been shown to include the promotion of positive reinforcements, challenging of maladaptive cognitions, and improvement of life functioning. Due to high comorbidity rates between problem gambling and other psychiatric conditions (Hopko, Lejuez, Lepage, Hopko, & McNeil, 2003; Morasco, Weinstock, Ledgerwood, & Petry, 2007), activity scheduling interventions are likely to help prevent problem gambling relapses directly as well as indirectly. Dowling, Jackson and Thomas (2008) suggest that a therapeutic–remedial approach to leisure counselling is a direct and in-depth approach most appropriate for individuals with specific leisure related behavioural problems, such as problematic gambling behaviour. This approach examined leisure attitudes and self-concepts, coping skills, behavioural problems and impairments, and support systems. Some important objectives of the therapeutic-remedial approaches to leisure counselling are firstly, to identify the leisure related behavioural problems and their causes. The next step is to identify changes in leisure attitudes and behaviour to alleviate the behavioural problem. Based on these findings it is important to develop and individualise programs of recreational activities that will facilitate the integration of participating in leisure activities in a community setting. The initiation of involvement in activities takes place firstly with supervision; and as the development of community contacts progresses it will lead to the client's participation in community activities without supervision (Dowling et al., 2008).

Social connectedness. Recovering gamblers often report experiencing a void or massive hole in their daily lives when they attempt to stop their gambling activities (Wood & Griffiths, 2007). Those who become so consumed by their problem gambling can become completely detached from processes of socialising and friendships outside of gambling (Symond, 2003). For these individuals, fostering new friendships and social connections can be very difficult, and increasing their self-confidence is key to managing a non-gambling life on their own (Jackson et al., 2012). There is a difference between *loneliness* and *social isolation*. Someone can be surrounded by a group of people but feel lonely, and others can be all by themselves at home and do not feel lonely. Loneliness can be described as a perceived feeling of a gap between a person's desired level of social contact and the actual number of social contacts (Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015). On the other hand, there is an objective measure of the number of contacts a person has, thereby, measuring the quantity of social connections (not the quality of social connections).

When policy makers and researchers trying to address either social isolation and/or loneliness overlook the distinction between the two, it makes it difficult to develop appropriate initiatives. Current research findings conclude that either perceived or real loneliness and/or social isolation is comparable with other risk factors for early mortality (Holt-Lunstad et al., 2015). In their study *Social isolation, loneliness and their relationships with depressive symptoms: A population-based study*, the authors found that, even though there is a difference, at the same time there is a significant overlap between social isolation and loneliness. Both have a strong association with depressive symptoms (Ge, Yap, Ong, & Heng, 2017).

Social factors such as a lack of social connections are now considered to play a pivotal role in the development of a behavioural or substance addiction, as well as in recovery from those conditions. For example, the influence of peers may encourage or prevent an individual from participating in a gambling activity depending on that social group (Dingle, Cruwys, & Frings, 2015). Botterill, Gill, McLaren, and Gomez (2015) examined the mediating role of loneliness in fostering problems with gambling, finding that the absence of a partner was strongly linked with higher levels of loneliness. Higher levels of loneliness were identified to be a predictor of problem gambling among men and women (Botterill, Gill, McLaren, & Gomez, 2016). A study focusing on female gamblers in Victoria also supports this finding. Although women who gambled did not consider themselves any more socially isolated or lonely than the non-gambling women, problem gambling women did face significantly higher levels of social isolation and existed in social groups in which gambling was normalised (Trevorrow & Moore, 1998). Causation was not determined in the study, but it highlighted an issue of the illusion of sociability of gambling activities (Livingstone, 2005).

Social capital existing in social arrangements and relationships refers to relative advantage and resources that can be drawn upon (Coleman, 1988; Putnam, 2001), or 'personal and social resources' (Lin, 1999, p.1). The benefit of social capital is not necessarily derived from existing in social networks but rather from the resources that these networks make accessible to engage in various activities. The loss of social capital in communities is recognised through individual community members lacking ability to participate, cooperate, organise, and interact (Putnam, 2001). The impact of casino gambling on social capital in communities throughout the US was examined by Griswold and Nichols (2006), who found that the presence of a casino within 15 miles of a community is associated with a significant reduction of social capital. This was measured through dimensions such as volunteerism, group participation, and trust. In Australia, social clubs or sporting clubs that gain revenue from gambling activities can be seen to contribute to social wellbeing through the provision of services to communities (Pickernell, Keast, & Brown, 2010). However, the social impacts are dependent on the economic impacts, which includes how gambling revenue is accrued and the way it is structured in relation to communities (Department of Justice, 2011).

There is an association evident between certain circumstances of older people, such as low income, removal from workforce participation, presence of morbid disability, and being without a partner, and reliance on gambling to fulfil mental health, recreational, and social needs (Southwell et al., 2008). This will become a problem for older problem gamblers, especially, as cessation of gambling will leave limited options to fill the gap left by removing themselves from their existing social context. Another problematic issue highlighted by Bergh and Kuhlhorn (1994) is that, apart from gambling, problem gamblers are not typically involved in other social activities. This has consequences for problem gamblers once they cease their gambling activities, including being left with a considerable amount of unstructured time, inadequate social skills, and feelings of emptiness (Hodgins, Currie, & el-Guebaly, 2001; Walters, 1994). As highlighted in the subsection 'Comorbidities and problem gambling' above, up to 50% of problem gamblers also suffer with other psychological issues and impaired relationships with family and friends. Hence stopping gambling may compound the issue of significant feelings of isolation (Bergh & Kühlhorn, 1994). Those who become so consumed by their gambling can become completely detached from processes of socialising and friendships outside of gambling (Symond, 2003). For these individuals, fostering new friendships and social connections can be very difficult, and increasing their self-confidence is one key to managing a non-gambling life on their own (Jackson et al., 2012). Hodgins and El-Guebaly (2004) examined the precipitants of relapse for problem gamblers, finding that major relapses were strongly associated with perceptions of isolation and being alone, whereas relapses for problem gamblers existing in strong social networks were found to be minor in comparison (Hodgins & el-Guebaly, 2004). Dingle et al. (2015) discusses recovery in terms of recovering from a substance abuse disorder. However, their conclusion that fostering recovery supporting social connections provides a significant benefit for maintaining abstinence and can be applied to problem gambling. One pathway into problematic gambling behaviour has been associated with social isolation and disconnection from social networks other than those established through the gambling (Dingle et al., 2015), while at the same time establishing a social identity strongly linked with the behaviour. Problem Gambler, Gambling Addict, Pathological Gambler strongly defines a person as belonging to a gambling as part of a *social group* (Dingle et al., 2015). Social connectedness meets some key psychological needs, a sense of belonging and purpose (Dingle et al., 2015).

A risk factor for worse health and reduced mental wellbeing in an individual is a lack of social connections, while decades of research has demonstrated that social supportive networks promote positive outcomes in the treatment of chronic conditions (Cohen, 2003; Karelina & DeVries, 2011). Hence, cutting back or removing oneself from gambling, is often an ineffective measure if people cannot manage to fill the gap left. The presence of personal support structures for a recovering problem gambler can serve to mediate impulses to gamble. They help ground individuals in recovery when they start to exaggerate their perceived odds of winning, which often precedes major relapse events (Hodgins & el-Guebaly, 2004). The concept of social identity has been particularly relevant in addiction research, as individual self-concept and the way people define themselves in the world can be heavily influenced by social groups (Dingle et al., 2015). Despite growing attention towards the positive impacts that group membership can have for health and wellbeing, little research has explored the impact that social identity transformation can have for those recovering from addiction (Buckingham, Frings, & Albery, 2013). Social identity in recovery does not align with the reductive bio-medical model of addiction. This model would deem changing identities as not relevant, because it describes addiction is a disease that can be remedied solely by medical treatment. Yet, changing one's identity from someone actively addicted to an identity as someone on the recovery pathway acts as positive reinforcement (Dingle et al., 2015). The identity change is more heavily reinforced when the individual is involved with a social group or network of other recovering individuals (Dingle et al., 2015). Figure 5 demonstrates the transitioning into and out of a change of identity caused by addiction (Reith & Dobbie, 2012).



Figure 5. Thematic analysis of interviews with clients in therapeutic drug and alcohol treatment showing changes in social identities over time

Reith and Dobbie (2012) utilised qualitative data on 'gamblers' careers', finding that processes of individual behaviour change are embedded in wider social relations and centre on individual self-identity being transformed. This involves reconstructing the experiences and stories innately tied to material circumstances, particularly ones that relate to social relationships and money. Gaining control over gambling activity lies in reshaping the self, relevant to sociocultural settings (Reith & Dobbie, 2012). Another study investigated how being a member of a recovery group can help solidify a social identity associated with recovery and remove past associations with an addiction identity (Buckingham et al., 2013). Some authors suggest that processes of identity change may be essential to long term change and to embed meaning into a lifestyle beyond addiction (Kellogg, 1993; Koski-Jannes, 2002).

Having identified *lack of social connectedness* and *leisure substitution* as risk factors in recovery encouraged the author to develop the intervention program researched in this thesis. The following chapter will describe how the framework for the evaluated programs was developed, the key concepts, the value assigned to the program activities, and the steps that were taken to evaluate the effectiveness of the program.

CHAPTER V

Framework Development for a Relapse-Focused Program

The theoretical framework for these studies was developed on three levels. The overarching theoretical mental (1) framework was based on the author's lived experience with gambling related harm and recovery and informed the design of the program based on theories of behavioural change. The author identified (2) a gap in effective, evidence-based interventions which focused on providing support to individuals trying to maintain positive behaviour change of problematic gambling behaviour long-term. Based on the author's experience and the identified gap in relapse-focused programs the author developed the program content. Underpinning the program development was a strength-based (3) philosophy which operated on the assumption that all individuals, even if they were experiencing problems, had resources within them to make behavioural changes. This approach was contrary to the more common deficit-based approach in developing interventions, which are focused mainly on the problems associated with the behaviour. Many of those interventions are based on addressing the individual's and their family's pathology, deficits, abnormality and disorder. Saleebey (2002) the most prolific writer on strength-based approaches in his article 'The Strengths Perspective in Social Work Practice: Extensions and Cautions' says: "The strength perspective does not deny the grip and thrall of addictions and how they can morally and physically sink the spirit and possibility of any individual. It does deny the overweening reign of psychology as civic, moral, and medical categorical imperative" (Saleebey, 2002:297). Therefore, the content of the program was informed by the focusing on strengthening the individual. The author developed a program specifically targeting two identified risk factors for gambling relapse, lack of social connectedness and leisure substitution. This program attempted to fill a gap in the treatment services where the

post-gambling phase for clients had not been addressed. The program comprised four applications (called studies below) and a separate study involving volunteers.

All four studies presented in this thesis were not strictly speaking pilots. Rather, they may be considered small-scale applications of a program design which is past the development stage and, in this sense, constitute a proof of concept (PoC) series (Jackson et. al, 2012). A PoC is a cost-effective approach for establishing initial evidence as well as being an invaluable source for improving the intervention technology at various stages, before further resources and research are invested.

For each study an evaluation plan was developed. This was done within the context of an evaluation capacity building (ECB) approach. The ECB is a program theory framework which has been embraced by many government services as well as international research and development agencies, such as the W.K. Kellogg Foundation. Within the Australian context, program theory has been used in the *Review of Government Services Series* (see e.g. Productivity Commission, 2019) as well as by individual jurisdictions. The following Figure 6 is reprinted from the *Taking Action on Problem Gambling Evaluation Framework* (Department of Justice, 2009) and illustrates the key elements of the program theory (Jackson & Problem Gambling Research and Treatment Centre, 2011).



Figure 6. Evaluation Logic Model. Reprinted from *Taking Action on Problem Gambling: Evaluation Framework* by Office of Gaming and Racing, Department of Justice (2009) p.12.

For the evaluation of all four studies, the following terms and definitions have been used and are listed in Table 8. The application of the model in all four studies viewed the recovery process through the lens of the *transtheoretical model of change* (Clarke, 2006; Prochaska, DiClemente, & Norcross, 1992), where the action stage or recovery phase should typically end and participants complete their participation in an intervention/program. The *maintenance* stage then proceeds, in which the new behaviours are practiced and reinforced. The following sections describe the various stages of the transtheoretical model which was developed by Prochaska & DiClemente (1983).

Table 8

Key Terms and Definitions

Key Terms	Definitions
Output	Description of the actions that have resulted from investment in a program
Outcome	Overall effect(s) resulting from the implementation of a program
Indicator	Data that captures change in the area being measured over a specific time period
Output Indicator	Data that measures change in outputs
Outcome Indicator	Data that measures change in outcomes
Target	A designated result for an output or outcome usually associated with a specific time frame
Milestone	A designated point along a continuum between the beginning point (benchmark or baseline) and the conclusion of a program

Stages of Change (Prochaska & DiClemente 1983)

The Transtheoretical Model by Prochaska and DiClemente (1983) and Prochaska, Di Clemente & Norcross (1992) is an integrative, biopsychosocial model which captures the process of intentionally changing problematic behaviour, including gambling. Whereas many theoretical models seek to explain how and why people develop problems with gambling in the first place (discussed in Chapter III), this model captures the change process of problematic behaviours, including gambling. This model has gained widespread popularity in health psychology and addictions and is being used to guide interventions and allocate treatment resources in several fields. The research conducted in the thesis used this model as a framework for the design of the intervention program. The Stages of Change Model was originally developed in the late 1970s and early 1980s by James Prochaska and Carlo DiClemente at the University of Rhode Island when they studied how smokers were able to give up their addiction to smoking. In their paper 'In Search of How People Change – Applications to Addictive Behaviours', Prochaska, Diclemente and Norcoss (1992) concluded that the processes of change could be applied for people who were in therapy and those who had recovered on their own. Their integrative biopsychosocial model captures the process of changing harmful behaviour intentionally. Traditionally, changing problematic behaviour was always viewed and explained as an event. For example 'quitting smoking', stopping the consumption of alcohol does not take into consideration that it is not an event but a process. Prochaska and Diclemente also acknowledged that not everyone goes through the stages in a linear fashion. Many individuals go through the stages and regress to an earlier one. They also found that most of the current treatment programs were mainly targeting people who were proactively wanting to engage in therapies which did not address the whole cohort experiencing addiction-related problems. For example, some therapies will not capture and support people who do not think that they have a problem in the first place (i.e., those who are still in denial). The next sections will outline Prochaska's and DiClemente's (1983) six (five official and one unofficial) main stages as they can be applied to problematic gambling. It is important for any therapist to identify the stage that the client presents at the initial assessment so that an appropriate referral and/or treatment can be offered:

Precontemplation: Person is in crisis but does not think gambling is a problem. In this stage, a person is often described as being in denial, due to their claims that their behaviour is not a problem. In this stage, they are not open to discussing gambling as an issue and, if they present to a professional counsellor, more often than not it is due to pressure from significant others and/or mounting debts. A person in this stage feels resigned to their current state and/or believes that they have no control over their behaviour. In some cases, people in this stage do not understand that their behaviour is damaging or are under-informed about the consequences of their actions. They can change their behaviour, however, and maintain the change while the pressure from others is on but revert to the old behaviour as soon as the pressure is off.

Contemplation: Person mentions that gambling causes some problems but thinks that it is not worth doing anything about it. A person in this stage of change begins to contemplate the presence of a (gambling) problem and considers the possible need for change. They may voice some concern about their behaviour. They might react negatively when told that they have problem (e.g., become defensive or try to deny it). The contemplation stage is characterised by 'sitting on the fence'. People can stay in the contemplation stage for a long time, with many staying there forever. Change is tough. It is hard to take a first step. Chronic contemplators spend much time thinking and not much time doing. This is in part because "contemplators struggle to understand their problem, to see its causes, and to think about possible solutions" (DiClemente & Velasquez, 2002, p. 208).

Preparation: Person wants to cut back on gambling and is thinking about doing something about it. The person considers some change-related goals and prepares to take action for change. A client in the preparation stage implements small changes towards their change goal. If their ultimate goal is to stop gambling completely, they might implement some ways of reducing frequency and or opportunity to gamble. For example, they take less money, reduce the bets, ask friends to go gambling with them etc. They may actively collect information about how to change their behaviour. Just because a person is preparing to make changes does not mean that programs offered by treatment professionals, or self-help books chosen by the person in the preparation stage, will result in any measurable action. It is very important to understand that willingness to change does not automatically result in any buy-in to offered programs or services.

Action: Person is proactively taking steps to address his/her problems with gambling. In this stage, a person is taking proactive steps in pursuit of change. For many people this is the stage in which they are looking for help, as they are clear about the fact that they have a problem and that they want to do something about it. The client in the action stage has decided that there is a problem, they have formulated a solution to that problem, and they are taking action based on that solution. The solution could be either to stop gambling entirely or to reduce their gambling significantly. At the action stage, they work tirelessly to implement the chosen treatment option and, once they stopped gambling or reduced their gambling successfully, they begin to feel more positive about themselves. They feel more in control and less being controlled by problem gambling. This has an immediate effect on their levels of stress and, in a positive way, on their self-esteem. They are deliberately choosing new behaviours and, consequently, gaining new insights and developing new skills. People in the action stage are enthusiastic and motivated. Most therapists will assume that people who are entering therapy are people in the action phase. Prochaska and Prochaska (1999) noted that most treatment programs are built around the action stage, even though only a small percentage of clients are actually in the action stage when presenting for the first time.

Maintenance: Person is committed to maintaining their changed behaviour and has achieved their desired outcome either to stop or control their gambling for over six months. In this stage, change-related habits are established, practiced, and maintained over the longer term. Even though this is a great achievement for the client, this stage is one of the most difficult. The maintenance phase involves successfully avoiding former behaviours and keeping up good new ones. Most problem gambling treatment service programs and interventions stop before this point so that, for some people, counselling may only achieve part of the work. The rebuilding of meaning and connections may well validate and complete the work of counselling services and, therefore, support maintenance of the new behaviours. In this stage, it is very important to focus on teaching new skills and provide recreational alternatives to gambling (Korn & Shaffer, 2004).

Lapse/relapse: Person has lapsed/relapsed. Lapse/Relapse is the (un)official sixth stage of the model of change, because it does occur frequently. The client gambles in a manner contrary to the goals that they have set and maintained for a period of time. This is an opportunity to review the goals, maybe identifying unexpected triggers, identifying new goals, and recommitting to achieving them. The main aim is to prevent the possible danger of a full-blown relapse. A lapse defines situations whereby the client 'lapses' once and prevents 'relapse' by implementing actions to get back on track. A relapse defines situations whereby the client stage, and presents the client continuous to gamble, quickly regresses to the problematic stage, and presents similarly to the pre-contemplation phase.

As mentioned before, problem gambling is characterised by very high relapse rates, with figures as high as 75% being cited (Hodgins et al., 2007). Most tertiary interventions stop before addressing the maintenance and relapse phase. Evidence has also suggested that social isolation and low motivation to engage in other activities are risk factors which can lead to continuous lapses/relapses of clients (Dowling et al., 2008; Wood & Griffiths, 2007). However, most problem gambling treatment programs do not specifically address those risk factors. The following section explains the development of a program addressing 'lack of social connectedness' and 'lack of leisure substitutes' targeting specifically people in the action and/or maintenance phase in recovery.

Program Development to Address Action and Maintenance Phase

The program which was developed and trialled in this research project is based on the recovery framework provided by Prochaska and Diclemente (1993), described in the previous section. It is important to mention that the stages of change model by Prochaska and

Diclemente (1983) has not been without criticism. Some critics argue that there is no conclusive study that provides the evidence that changes of problematic behaviour occurs in stages. "Rather than simply being in one stage or another, clients show patterns of differential involvement in each of the stages" (McConnaughy et al., 1983, p. 374).

The stages of change model is clearly a process and not a one-step at a time description of behaviour. Most people progress through the different stages finding their own way to change their problematic behaviours successfully in their own time. For example, expecting behavioural change by simply telling someone who is still in the pre-contemplation stage (i.e., 'in denial' stage) that they must go to a certain number of GA meetings or attend an imposed activity would be counterproductive because people must be ready for change. Each person must decide for themselves when they are ready to move on to the next stage or engage in therapy. This can be very different for every person because stable, long term change cannot be externally imposed.

The stages can be represented as a cycle rather than as a linear model which suggests that people go through these stages in sequence. In reality, people can jump between stages and go backwards and forwards. Sometimes they are in two stages at the same time. Nevertheless, this model provided a useful way of understanding the process of change for this program. It gave the evaluated programs the structure needed to strengthen both the action and maintenance phases as described above. Hence, the developed and trialled program presented in this thesis addressed both the action and the maintenance stages by creating a structured engagement of at-risk individuals who had been in counselling or were near completion of counselling. A partnership group of support volunteers, trainers, clinicians, workshop facilitators, and a project worker accompanied participants through a journey of (re)connection to meaningful/purposeful social networks. This was done by engaging participants in recreational and educational activities.

designed as a mechanism for embedding the change work initiated during counselling or selfhelp strategies. Those activities did not focus on the problematic behaviour, but the engagement in the program intended to provide a relapse prevention strategy for those confronting a black hole in their lives created by their abstaining from gambling and their lack of social connections.

The following section will describe the key concepts of the model. The four studies in the program each had different names. This was required because each was funded by a different funding body. For evaluation purposes, it was intended to replicate the program activities, processes, and policies in across all four studies. This proved quite difficult because each study had different contractual specifics. It is also important to acknowledge that the learnings made from one application of the program informed the design of the next version in order to improve the quality of the program and increase the value for participants. The four program versions varied in length, number of participants, and program location. However, the overarching theoretical and conceptual framework and some key concepts underpinning all four studies was consistent and is outlined in the following section.

Methodology

The program trialled in the four studies was developed to answer the following research question: Is it possible to support participants in recovery who have addressed their problematic gambling behaviour through therapy by developing a program that provided structured activities and education, and facilitated social engagement?

Throughout this thesis, the term model, project, program, or intervention is used to describe the object of evaluation. The practice of evaluation of the first program (Re)Making Meaning (RMM) led to the redesign of the second program MoreConnect 1 (MC1). This practice was continued for the third program, MoreConnect 2 (MC2) and the fourth program, Dare To Connect North West (DTCNW). "The author administered pre-and post-questionnaires to

collect quantitative data to program participants of all four programs. The author tried to utilise qualitative data to support the quantitative findings and through narrative analysis conclude if the intervention was successful (Merriam, 2002). The collection of qualitative data differed for all four programs. For the first program RMM, focus group interviews with participants, volunteers and reference group members were conducted and evaluated. Budget and time restraint in MC1, MC2 and DTCNW made the qualitative research component inconsistent. The author relied on journaling her observations, as well as documented communication shared with the author via participants journal entries and personal experiences and artwork by produced by the participants to supplement the quantitative findings." For the first program RMM, group discussions with participants, volunteers and reference group members were conducted and evaluated. The discussions followed a semi-structured interview format in which the following main questions were asked:

What were your initial impressions of the program? What was your experience of the program? How useful was the program? What did you learn? Name something that worked well and name something that did not work well and what sort of person would benefit most from the program?

The volunteers/support people were asked similar questions but with a stronger focus on their interactions with the participants and project worker. Both group interview sessions were tape-recorded, and verbal consent was obtained from the participants and volunteer support staff.

The reference group comprised agency and external personnel who provided ongoing advice and monitoring for the project.

The following questions were asked:

Did the project meet expectations? Were the organisational arrangements appropriate? How would you run the project if you had the chance to do it again? What have you learned about the delivery and form of the implementation and what advice do you have about a possible statewide roll-out?

Budget and time restraints in MC1, MC2 and DTCNW made the qualitative research component of those studies inconsistent. The author relied on journaling her observations, as well as documented communication shared with the author via participants' journal entries and personal experiences and artwork produced by the participants to supplement the quantitative findings.

For the development of the evaluation framework the following steps were implemented across all four programs:

- Reference group
- Program design
- Evaluation plan
- Data analysis

Reference Group

All program applications were overseen by a reference group. The reference groups involved representatives of key stakeholders. Members included representatives of the funding body, the evaluation team, local government, counselling services, and the program manager. The role of the reference groups was to provide support, advice, and feedback to the program manager. The reference groups met on a regular basis and were involved in designing, reporting, and contributing to the evaluation of all four programs.

Group – Intervention - Program Design

Organising groups around a therapeutic goal is known to be a powerful tool, offering support to members and increasing social connectedness (Gitterman & Salmon, 2008).

The structured use of activities linked to a purpose facilitated in a group program has been a recognised way of influencing the purpose of therapeutic group work. Activity focused groups have been created for recreation and education purposes hundreds of years ago. Many years ago the purpose of those groups was providing support to members on a day by day basis and the provision of social connectedness and belonging (Kurland & Salmon, 1992).

The general need for human beings to congregate has led to the development of many group work models and has been proven to be effective in working with people suffering various mental health conditions, drug and alcohol, family violence and it seems to be an emerging strategy in treating problem gamblers (Ladouceur et al., 2003). Psychoeducational groups, skills development groups, cognitive behavioural groups, support groups and interpersonal process group psychotherapy are the five most common models when working with people suffering various mental health conditions as well as drug and alcohol dependency (Abuse, S. (2005). Mental Health Services Administration: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs (TIP 43). Rockville, MD.).

The 'needs acquisition and behaviour change (Needs ABC) group work approach used an integrated therapeutic perspective by combining cognitive behavioural, motivational, and emotion focused models (Kurland and Salmon, 1992). It was developed for group work at the McGill Domestic Violence Clinic and became a frontrunner for other programs in group work integrating a variety of methods. The Needs ABC approach does not focus on the problematic behaviour rather it provides the client with a save emotional environment to support the learning and relearning of healthy ways of addressing the relational needs behind maladaptive behaviour (Gitterman & Salmon, 2008). The goal of the Needs ABC collaborative work means that clients are better prepared and able to (re)integrate into 'real life' situations without falling back into problematic behaviour.

The design of the group work model discussed in this thesis used an integrated approach, combining concepts from the Needs ABC and Peer Support model. The program aimed to assist problem gamblers in their recovery by providing a safe group environment with the aim of building social confidence, delivering recovery-relevant education, and fostering social connections. It involved bringing together participants who had experienced significant harm from gambling and, with the help of trained volunteers and engaging them in attending various program activities. Most volunteers themselves had lived experience of problem gambling and most of them, except for the first group, had been participants in previous programs. The volunteers self-assessed that they were stable in their recovery and wanted to support others to achieve the same. Participants and volunteers engaged in regular social activities, entertainment, and educational/empowerment sessions.

The author, program developer and facilitator of the four studies needed to possess specific personal qualities that are recognised of being essential in an effective leader of many group interventions. Flores (1997 p. 456) said that: "many therapists do not fully appreciate the impact of their personalities or values on addicts or alcoholics who are struggling to identify some viable alternative lifestyle that will allow them to fill up the emptiness or deadness within them." Therefore, it was important for the leader of this group intervention to demonstrate the joy of being alive and having recovered from gambling related harm herself. The group-work design for this intervention did not follow a strict selfhelp, peer support format. It also was not a psycho-educational group intervention. Consequently, the attributes of the leader/program manager/facilitator of this intervention needed to provide a unique mixture of professional leadership and peer-led group intervention skills (Flores, 1997; Gitterman & Salmon, 2005).

Recovery group-work can be very emotionally intensive. It was important that the leader of this program was in control of his/her own emotional reactions and in a healthy emotional state. Because this group program presented a new way of addressing relapse prevention in recovery, the manager needed to be creative and flexible. If mistakes were made, she was able to admit and apologise for it. This helped participants and volunteers to understand that nobody is perfect and that they, like everyone else can make mistakes and still maintain their position in the group. Another very important quality of a group leader for this program was that she trusted individuals in the group and in return expected them to trust the decision that she made. Humour and empathy were important character traits that if the group leader used them appropriately supported the overall positive approach to recovery. Empathy with the participants' unique recovery journey was a very important skill but at the same time the leader needed to be able to distance herself from taking on emotions that would jeopardise the overall group dynamic. One of the important feelings that the leader needed to empathise with was shame. This is the most common feeling present amongst people with gambling related harm (Brown, et al., 2016). The leader of this program tried to address this by focusing on positive interactions amongst the group as well as the progress that individuals made to support a reconstruct an affirmative image of themselves.

The defined program outcomes for the four studies were: a) a measurable reduction in the identified problem gambling relapse risk factors of *social isolation* and *lack of recreational alternatives* for participants; b) maintenance of gambling related behaviour changes for participants (for some participants this meant maintaining abstinence from gambling and for others it referred to maintaining controlled or reduced gambling); c) enhanced learning and support for the participants by volunteers; and d) creation of a theoretically viable relapse prevention model to achieve these outcomes. The figure 7 below shows the project logic model.

TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS



Figure 7. Project logic model.Reprinted from Problem Gambling Research and Treatment Centre. The Victorian Problem Gambling Innovation Grants Program Evaluation: Final Report – (Re)making Meaning, University of Melbourne: PGRTC (2011)

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The design of the four programs took a strengths-based approach. It assumed that everybody involved in the program had the capacity to learn, grow, and change and that people who came to the program were already in possession of natural abilities, capabilities, and strengths to be able to recover and achieve their own defined treatment goal: abstinence or controlled gambling (Vasiliadis & Thomas, 2018).

Study 1 (Re)Making Meaning (RMM), Study 2 MoreConnect 1 (MC1), and Study 3 MoreConnect 2 (MC2) all started with a weekend away. Study 4 Dare To Connect NW (DTCNW) trialled six short versions of the intervention, of which three started with a weekend away, including an overnight stay, while three started with a weekend but did not include an overnight stay.

Unique to this program was the way in which social activities and education were combined. Hence, all programs in Studies 1-4 included structured social activities as well as educational workshops. They were designed to be varied, stimulating, and fun. They provided an opportunity to socialise with others and rediscover ways for people to enjoy themselves without gambling. Scheduled on weekends, the program tried to fill the void that a significant number of people experienced during a time when they did not have work to distract them. Often, on the weekends, they were confined to their homes, without human support, but with a lack of funds and no motivation to engage in other activities. These program activities and connections were a mechanism for embedding the change work that many participants started in their counselling. Activities were designed as a part of a relapse prevention strategy for those confronting a black hole in their lives once they stopped gambling. The design of the programs in the four studies included the same activities on the start-up weekend. In an attempt to enhance consistency in program delivery, an effort was made to engage the same facilitators for educational and social activities. Program participants were encouraged to attend this first weekend. The following section will describe, and provide a rationale for, the activities that were offered on the start-up weekend in all programs. This section also incorporates a reflection by the facilitators who conducted the activities in all program versions.

Icebreaker: Fun activity. The aim of this activity was to create a positive group atmosphere and help people to relax and break down social barriers. We chose a fun, movingaround activity that loosened people up and made them alert and engaged. Recall that the groups consisted of participants and volunteers, all of whom had lived experience of problem gambling. This icebreaker activity was facilitated by one or two of the program volunteers. Taking on the role of the facilitator for an activity contributed to improving the volunteer's confidence and also enabled participants to see what was possible for them in the future. The volunteers' lived experience gave them extra credibility in the eyes of the participants.

Gentle morning exercise and a singing workshop. Both activities were facilitated by the same instructor, aimed at bringing about a more positive state of mind, and helped to keep depression and anxiety at bay. Research showed that singing in a group has benefits for people suffering from mental health conditions including anxiety and stress (Shakespeare & Whieldon, 2018). Gentle morning exercise was offered before breakfast and was voluntarily. The aim was to provide participants with an experience of exercise that was gentle and did not require physical fitness. This activity was designed to prevent stress responses experienced by many participants who attended the program reluctantly. Many participants started full of angst. Focusing on the gentle movement of the body first thing in the morning helped them to keep their creativity and optimism levels in a positive range (Kim, Hyunna, 2013). The instructor provided the following comments about the role that the sessions played in the overall program objectives:

"I have been running workshops in movement and voice as part of the program since its inception. I am always impressed by the safe and encouraging environment created by the

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program manager. Participants who are clearly deeply challenged by expressing themselves physically are prepared to step up and take a risk. In doing so they learn something about themselves that they often did not know before. They learn that they have access to feelings of wellbeing and fulfilment through something as simple as engaging, among others, with their physical and creative self in a mindful way. As the program has progressed, volunteers returning to the group after recovery bring their new experience of, and confidence in, singing and movement to encourage new participants to participate more fully, thus increasing the impact and outcomes of the workshops." (Facilitator)

Returning participants reported no longer being afraid to sing, of joining choirs or of simply singing more in their daily lives as evidence of the capacity of this program to introduce meaningful change in their lives. The value of movement and singing in improving mental health and well-being is well documented. In this researched model the anecdotal evidence aligns itself predictably with this research.

Staying positive through laughter. This session was facilitated by two instructors who were involved in all programs. The professional facilitators delivered their sessions using humour as a vehicle to pass on information. Laughter is contagious. When people laugh together they become connected, enjoying a single focus and sense of community (Provine, 1996). This can lay the foundations for greater tolerance, acceptance, and a willingness to cooperate in changing attitudes towards problem gambling and stigma. There are many examples where humour has been used to raise awareness, e.g. regarding mental and physical health conditions. Some mental health examples include David Granier's *Stand-up for Mental Health* (Canada), The Australian Broadcasting Corporation's (ABC) *Mental As* project, and television programs such as Josh Thomas's *Please Like Me*.

Historically, humour and comedy have been used to deal with taboo subjects. There is now robust scientific evidence to show that comedic performance and the use of humour can reduce stigma (Corrigan, Powell, Fokuo, & Kosyluk, 2014). For example, a three-arm randomised control trial showed that humour using self-disclosure significantly reduced stigma associated with a mental health condition (Corrigan et al., 2014).

Comedy and the use of humour have also been shown to improve help-seeking behaviour (Jones et al., 2014). Jones et al. (2014) demonstrated that comedic performance improved mental health and help-seeking behaviour in military personnel, a profession known to have high levels of stigma attached to mental and physical health conditions. There is also scientific evidence to explain this phenomenon on a physiological level. When people laugh together it is like a powerful remedy to stress, pain, and conflict. It restores balance, lightens emotional burdens, inspires hopes, connects to others, and keeps people grounded, focused, and alert. Knowing that humour results in great advantages to the body and mind, it would make sense to use laughter/humour easily and frequently as a resource for surmounting problems, enhancing relationships, as well as supporting both physical and emotional health. Beside lowering blood pressure and getting more oxygen to the blood, it gives a great workout to facial, abdominal, respiratory, and other muscles. It reduces stress hormones like cortisol and adrenaline (always in overdrive during excessive gambling) and, most importantly, it increases memory and learning (Berk & Tan, 1996).

Laughing together increases endorphins, sending dopamine to the brain to provide a sense of pleasure and reward. This then makes the immune system work better and changes brain wave activity towards what is called a gamma frequency, improving memory and recall (Berk & Tan, 1996). Mental health disorders such as anxiety and depression, often found in people struggling with gambling problems, are momentarily eased when people laugh (Holdsworth et al., 2015). Humour shifts perspective and enables us to see situations in a less threatening, more realistic, and funny light. A humorous perspective creates psychological distance, which can assist people when feeling overwhelmed. Humour and playful

communication strengthen our relationships by triggering positive feelings and fostering emotional connection. When we laugh together, we create stronger bonds. Such bonds can help to protect us against disappointment and life's challenges (Martin, 2001).

Here is the reflection of the facilitators who developed and ran this workshop in the four programs:

"The focus of this first session in each program is helping people to feel relaxed and at the same time building self-esteem. This forms the foundation for all other educational sessions and enhances the success of activities and events in the program.

Participants learn to separate the problems they had with gambling from their intrinsic worth as human beings. 'Mind training' best described the range of valuable techniques taught to participants to better manage their thoughts, emotions and behaviour. This can lead to increased self-esteem and other inner strength such as confidence, resilience, optimism, determination and contentment. Of all the forms of courage, laughter is the most profoundly therapeutic. This session contributes to the fun and laughter within the program overall. People can get so caught up in the problem they are having that they lose their sense of humour. This session explains the benefit of humour and laughter and where to find humour to amuse themselves and others. The humour used is good-natured, playful and appropriate. It shows participants how to strengthen their sense of humour to sustain them in difficult times. The shared laughter in these sessions brings the group together quickly so they can make the most of the educational sessions and positive experiences within the program." (Facilitator)

Photography. "Photovoice, known as a participatory research strategy has been used to offer participants a different way to capture their journey of recovery from drug and alcohol addictions as well as mental health through the use of photography. The methodology of photovoice is an innovative tool to help participants to capture positive things and envision and different future. (Wang, 1999; Cabassa, et. al, 2013)." The choice to include photography

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in the initial start-up weekend was based on the observation of the author that people who are experiencing issues with gambling are often overexposed to artificial stimulation provided within the gambling environment. The focus of the photography workshop was to encourage people to look at the world differently and, especially, to search for what is beautiful around them and then take pictures. The pictures that they took became a visual representation of a better life and a better future.

The workshop facilitator commented:

"The joy I get out of seeing the participants creatively engage with the world around them through photography during the short time I have with them is something I find very rewarding. I know from personal experience just how powerful photography can be in providing a way of escape from everyday life. There are three main outcomes that I was hoping participants took away from the photography workshops that I conducted. The first was that I can excite and open up new and creative ways of looking at things by giving a range of tips on how to think outside the box when photographing something. The second is to encourage them to begin to see the potential in using photography as a way of personal storytelling, journaling and documentation, be it literal or abstract. The third is to highlight how photography can be a great way to engage with the broader community through online sharing and also photography clubs, creating possible ways of meeting new people. I am proud of how everyone who undertook the workshop and how much they enjoyed it." (Facilitator)

African drums workshop. The reason this activity was chosen was based on the fact that rhythm is a natural part of life. We all use it every day. From the beat of our heart, to the rhythm of our walk, from chopping the vegetables, to stroking the cat, we are working with rhythm. The intention of this workshop was to use every person's creativity, to get it out of their heads and just experience it in-the-moment when they were drumming. It was to experience joy and to enable them to forget all their problems for a while, and at the same time creating a sense of connection to themselves and to others. Maschi & Bradley (2010) have studied the impact on measures of wellbeing, empowerment, and connectedness of recreational drumming among social work students. They used pre- and post-questionnaires to evaluate outcomes among a sample of 31 participants in a two hour session of recreational drumming. Results of paired t-test analyses showed significant improvement on social connectedness, general wellbeing, and mental health (Maschi & Bradley, 2010). Other research has been conducted with soldiers suffering post-traumatic stress disorder (PTSD). Conducting drumming sessions with a group of six soldiers showed some reduction in PTSD symptoms but significantly increased a sense of openness, belonging, and willingness to share among the group (Bensimon, Amir, & Wolf, 2008). These sessions were conducted by different facilitators, so we were not able to add the facilitators' observations to this segment.

Story telling. For centuries, people from all walks of life have embraced the art of story telling as a way of understanding themselves and the world that they live in. Daniel Taylor's (1996) book *The Healing Power of Stories* talks about the fact that broken stories can be healed and replaced by healthy ones. Therefore, the program design for the first weekend always included a story telling session of recovery and healing. Even though not every story presented on the initial weekend was about gambling, the aim of this activity was to inspire participants to explore future possibilities and to create hope for their own future. Listening to someone else's story of recovery, from a life of misery to a life of opportunities, enabled the participants to see what could be possible if they were willing to persist and work through difficult times.

Evening entertainment. A number of different activities were trialled for the Saturday evening. The one that engaged most people was a hosted Karaoke session inspired by a singing workshop in the morning. Most participants and volunteers were willing to give

it a go, and the laughter and enjoyment continued to foster engagement, support, and an experience of belonging. The aim was to continue the social engagement and provide an opportunity to experience having fun through entertainment that did not involve gambling.

Education workshops. four program versions included a number of social and educational sessions. The content for the educational workshops was designed to help participants discover, affirm, and enhance their strengths to build a new pathway beyond addiction. The sessions were aimed at increasing choice by raising awareness, demanding attention, and asking participants to act on their learnings. They were designed to be informative, interactive, and interesting, with appropriate humour to keep people relaxed and attentive.

The main topics included in the programs were:

- Interpreting addiction neuroscience and brain changeability. Explaining how to use the mind to change the brain to unlearn conditioned harmful behaviour.
- Understanding self-esteem and the intrinsic worth of each individual.
 Knowing the building blocks of self-esteem and how to use them, including how people can discover and use their unique talents and skills for creating new experiences that add to life.
- Clarifying values and linking them with goals to decide what to do and how to do it to make needed changes.
- Developing healthy habits of nutrition, exercise, and relaxation/sleep.
- Increasing awareness of the connection between thoughts, feelings, and behaviours and how to manage these, especially for getting past distressing events and disappointments.
- Developing interpersonal skills for getting along with people, especially the difficult ones, including how to communicate effectively and assertively.

Learning the skill of setting goals and how to structure them into short, medium and long term goals.

Volunteers. Volunteers were an integral part of the four studies, bringing their individual talents, skills, and experience to both the educational and social aspects of the program. Those who had personal experience of gambling were able to offer understanding, inspiration and support at this important time for participants. Their feedback was invaluable, both in monitoring individual progress and in making suggestions for the program. The volunteers who attended the education sessions also found the information and reinforcement of learning particularly useful. The role of the volunteers, and the importance of volunteering for their own recovery, is documented in Chapter VII 'Volunteer Study'. It is important to mention that the program design also included specific training for the support volunteers. The training was provided over three days leading up to the start of each program.

Volunteer training. The first day was titled *The Incidental Counsellor*. The focus of this workshop was person-centred communication in emotionally-laden situations. It explored how to maintain an effective person-centred partnership while staying within your own volunteer role and time commitments. Volunteers learned how to provide support to a participant without taking on an official counselling role. The second day was titled *Professional Boundary Setting*. This workshop explored how to establish effective professional relationships which enabled volunteers to develop a collaborative and respectful partnership with the people they were supporting. The third day was a *role-playing* day, practicing and discussing complex scenarios to equip the volunteers to be more confident and prepared when supporting new participants. As mentioned before, each program led to improving the content of the next program version. This was also important when looking at the content of the volunteer training. This had a positive impact on the confidence and preparedness of the volunteers for all of the programs. All volunteers were invited to attend

regular meetings, debriefing sessions, and specialised refresher training with the program manager.

The Dare Devils social club. Participants from the four program versions were invited to join the *Dare Devils* social club's monthly outings during and after the completion of their individual program. This social club was founded by some of the participants and volunteers involved in the first program, RMM. It helped many people to transition from a supported group intervention to a self-reliant but structured social life. The Dare Devils met once a month, and the main aim was to enjoy social outings in the company of friends, thereby continuing to strengthen the social scaffolding that they had started to build in the program. In addition to these group activities, all program participants were encouraged and supported to find ways to get involved in other groups and activities which were on offer in their communities. Among the successes of this initiative were participants who decided to learn a new language, became volunteers for other organisations, joined a choir or a theatre group, and attended various sports activities.

The following sections will describe the four individual studies, including the outline of the program activities and the process of program implementation and outputs.

Study 1: RMM (2009 – 2011)

In 2009, (Re)Making Meaning (RMM) was funded by the Labor Government in Victoria under an innovations grant. The definition of innovation for the purpose of this grant was that it encouraged core government funded services to think about innovative treatment methods which would have the potential to improve significantly the delivery of the core help services. One of the government funded services decided to partner with Chrysalis Insight Inc. (i.e., the not-for-profit organisation founded and chaired by the author) to develop a program to reach a new target group. The innovative program aimed to fill a gap in the government funded service delivery model. Participants who had addressed their gambling through counselling self-diagnosed a vulnerability to relapse due to a loss of connection to recreational alternatives and a social network. RMM was the first trial of the program, a 12-month version funded under the innovations grant aimed at providing participants with skills and support to maintain abstinence or regain control of their gambling problems. It was the strongest of the program versions (see Chapter IV).

RMM commenced in February 2010 and finished in January 2011. It started with a start-up weekend away, at which participants, support staff, and volunteers met for the first time and engaged in social and educational activities, described in the previous section. After the start-up weekend, 30 participants and volunteers attended 22 organised events. These events were initially scheduled weekly and then moved to fortnightly. The social events included barbecues, visiting local wineries, live music events, a grand final party, bowling, karaoke, etc. An attempt was made to provide participants with a variety of engaging experiences and to encourage them to continue the activities on their own or with other program participants. In addition, an Internet forum was set up to give participants an opportunity to connect outside scheduled activities and a platform to chat with each other and organise informal events.

The original project plan envisaged that this program would be using a buddy system to support participants during the process of re-building their lives. It was planned that every participant would be asked to bring one person (family or friend) who would be willing to assist them through their whole journey of the program. Only seven of the initial group of 30 participants were able to bring a support person along, so it was necessary to change the model without losing the objective. 10 volunteers were recruited through the not-for-profit Chrysalis Insight Inc., while three more volunteers were recruited through the local media. While initially there was some concern about the small number of people unable to bring a support person, it validated the fact that we had connected with a group lacking social connections.

The initial start-up weekend brought 30 participants and 17 volunteers together for the first time and provided a great platform for interaction and discussions about "who was who". Within the first couple of months, the number of support volunteers decreased significantly. From the 30 participants who started, four participants with accompanying support persons (husband and wife, sister) dropped out quite early. Two of the participants with supporting partners indicated that they felt pushed by the family into project participation and expressed being upset about this. Another participant, with a partner who supported him to attend this project, had a severe mental illness which saw him hospitalised quite early in the program and eventually rendered him unable to attend events.

Only six of the volunteers who started attended events regularly and became a vital part of the group. Many one-on-one discussions to clarify the role of the volunteers were essential to the success of the project. It was predicted that people might be reticent, underconfident and in need of substantial coaxing and support to get them along to ongoing events. To prevent this from happening we recruited volunteers to support the participants in their journey. Those volunteers did not have lived experience with gambling related harm. When the groups came together for the first time, we did not specifically point out who was there as a participant and was attending in a volunteer capacity. However, what was witnessed was an immediate bonding in the group of participants with gambling related harm, the development of a strong sense of group identity, and a corresponding energy and enthusiasm after the experience of the initial weekend. Therefore, a volunteer's role as a peer support person became less critical than originally conceived.

From the 30 people who started the RMM in February 2010, 28 were referred to the project by the core government funded Gambler's Help service. One person was referred by a
psychologist who read about the project in the local paper, and one person was referred through a gambling venue self-exclusion program.

Three senior clinicians and the manager of the government funded service were all part of the project reference group. At the start-up weekend, two clinicians were present as a safety measure, being available for participants should their services be required. They were needed spasmodically through the two day event, but were needed more specifically at the end of the weekend when a number of participants required counselling based on emotional stresses that had been triggered.

Prior to commencement of the program the author collected data from a demographic questionnaire as well as meeting participants one-on-one for an informal chat. A suite of standardised measured were administered by the author pre-mid and post program. The collection of qualitative data included group-discussions with participants, volunteers, and reference group members following a semi-structured format.

Study 2: More Connect 1 (MC1 2011-2012)

This section describes the second version of the program, the MC1 program, including its activities and the process of program implementation and outputs.

MC1 was funded by a local government in Victoria, Australia. The local government, Moreland, was very concerned with the continuous increase of problem gambling in its area. It decided to increase the land tax for gambling venues in the municipality, which delivered them a significant amount of money. It decided to partner with Chrysalis Insight Inc. and use the extra money from the increased land tax to fund a program addressing problem gambling locally. This program version (MC1), like the first program version (RMM), aimed to fill a gap in the Gambler's Help service delivery model, i.e. in which participants self-diagnosed a vulnerability to relapse due to a loss of connection to recreational alternatives and a social network.

Even though the major components of the RMM were replicated in the MC1 program, it is important to highlight the differences between the two projects so that the findings in the evaluation of the MC1 data (Chapter VI) can be interpreted in the context of these variations. The lead time for MC1 to develop the project plan and recruit participants and volunteers was only six weeks. The lead time for the same process with RMM was six months. This had a major impact and resulted in a smaller group of participants being recruited. It was envisaged that the program would only be made available to residents in the funding body's area. This proved to be difficult, so it was agreed that participants outside of the local government area could be accepted in order to attract a reasonable group of participants. All program activities were held in Moreland to promote local business and activities.

The start of MC1 was mid-November 2011, and the momentum of the project was interrupted by the long Christmas/summer holiday break. Hence, including the lead time MC1, ran for just over six months as distinct from RMM which ran over 12 months.

The working relationship with the problem gambling counsellors from the core government funded Gambler's Help service in the local government area was not as productive as the working relationship had been with the service in the RMM program. Some referred participants were not suitable for this intervention. This was due to the fact that the health practitioners of this service were not as involved in the development and the day-today running of the program and therefore did not fully understand project aims and benefits.

The project budget for MC1 was significantly reduced from the budget that was available for RMM. This meant that it was not possible to engage as many professional facilitators for the educational sessions, which may have compromised the quality and impact of those workshops. However, the local access to many no-cost or very low-cost venues and activities, transport, administrative costs, and local contacts enabled the project manager to save money. Prior to commencement of the program the author collected data from a demographic questionnaire as well as meeting participants one-on-one for an informal chat. A suite of standardised measured were administered by the author pre- and post-program. Limited resources and the project brief by the funding body did not include a qualitative research component. The author decided to collect qualitative data by journaling one-on-on conversations with participants and volunteers, participants observations and two letters written by participants about their experience of the program.

Study 3: MC2 (2012-2013)

Even though the major components of the RMM and MC1 were replicated in the third program version (MC2), it is important to highlight their differences so that the different findings in the evaluation of the MC2 findings can be interpreted in the context of these variations.

The first two program versions, RMM and MC1, were managed by the author (and chair of Chrysalis Insight Inc), whereas the third program version, MC2, was managed by a project worker employed by the funding body the city of Moreland. The author was contracted to train and supervise the project worker and conduct the evaluation of the MC2. The project worker started in November 2012. By the beginning of February 2013, she had recruited 16 participants. Except for one participant, all others had been in counselling for their gambling problems. Similarly to the experience of MC1, the project worker faced the problem that during the long Christmas holiday period many counsellors were taking holidays. Referrals were very slow. An attempt to attract participants through an advertisement in the local paper resulted in one extra person being recruited to the program. The project worker was responsible for data collection. There were problems with administering the questionnaire pre – and post-program. From the (already small number of 11) participants who started the program, only three people who completed the program filled

out the post-questionnaire. Therefore, the quantitative data are not included in the results chapter for this group. There was no collection of formal qualitative data for MC1 except the creation of a small booklet which included artwork, poems and some written interpretations of the impact of this program on the participants.

Study 4: Dare to Connect north west (DTCNW 2014-2015)

The fourth and final version of the program, DTCNW, was funded by the Victorian Responsible Gambling Foundation under a *Prevention Scheme Grant* obtained by Chrysalis Insight Inc. The grant submission specified that programs must be run in the north west of Melbourne. Regional data from 2009 for Melbourne's north west and inner north region (see Appendix A) showed the largest proportion of at-risk gamblers and the highest regional losses on poker machines in Victoria. Two in five calls to the free Gambler's Helpline came from this area. We had no reason to think that this situation had changed by 2014-2015. The combined EGM losses indicated the severity of the problem in this area (Billi, Stone, Marden, & Yeung, 2014). Indeed, this is still the case, with combined EGM losses of \$578,598,808 in 2017-2018 for the local government areas of Hume, Whittlesea, Brimbank, Maribyrnong, Moonee Valley, Moreland, and Darebin. This represents almost one-quarter of EGM losses for the entire state.

Problem gambling in the DTCNW catchment areas was related to social determinants such as social exclusion, accessibility to venues, financial hardship, mental and physical health impacts, smoking, alcohol and drug addictions, stress, and family issues (Hare, 2009). For example, two of the project partners, the cities of Hume and Maribyrnong, scored very high on the SEIFA index of disadvantage and were also in the top for expenditure from EGMs per adults in metropolitan Melbourne. SEIFA refers to the Australian Bureau of Statistics (ABS) Socioeconomic Indexes for Areas, which provides 'a method of determining the level of social and economic well-being in each region' (ABS 2008). Socioeconomic status has consistently been related to the level of per capita gambling losses and increased gambling harm (Productivity Commission, 2010).

DTCNW targeted sub-communities within the at-risk population who were particularly vulnerable, i.e. those who have neither the supports nor personal capacity to transition from a dependent lifestyle to a healthy and viable alternative lifestyle without additional support. It was a group that was already known to struggle to make community connections. The project offered this vulnerable community a real chance to find and maintain the balance in their lives which might have been lost through gambling related harm.

This intensive program ran six times over a 15-month period, and the length for each program was between 10 and 12 weeks. Three of the programs started with an overnight twoday start-up weekend while the other three programs also offered a two-day start-up weekend but did not include an overnight stay. Up to 10 volunteers encouraged each group to explore local recreational alternatives and build social connections and confidence. Many structured activities were offered during the course of the program and were similar to those offered in previous program versions.

As with the other three program versions, DTCNW offered regular recreational and educational alternatives to gambling. The key message chosen to market this program was: 'balance what you do for fun'. This message aimed to attract at-risk gamblers with the hope that engaging them in a program would prevent them from moving into a higher level of risk. In contrast, the three preceding program versions, RMM, MC1, and MC2, targeted people who had addressed their problematic behaviour through counselling and were at the end of their problem gambling counselling phase. These earlier program versions also included clients who were still in counselling and wanted to do more to speed up their recovery. DTCNW wanted the target group to include people who were not in counselling and/or never had gambling related therapeutic counselling. This change in the target group made the recruitment process and the running of the programs more difficult. Participants of RMM, MC1, and MC2 were referred and, therefore, had been screened for suitability by professional counselling staff. In DTCNW, clients were accepted even if they had not addressed their problem gambling before. Therefore, it was necessary to develop a more thorough screening process to prevent clients from entering the program who were in danger of harming themselves or others.

Active partnerships and collaborative referral arrangements between Chrysalis Insight Inc., which received the funding, North West Area Mental Health Service, Lentara Uniting Care Financial Counselling, Gambler's Help Western, and City and Mental Health Practitioners Network (MHPN) guaranteed recruitment of the target group to the program but also encouraged pathways to counselling support. Five local governments ensured accessibility to local low-cost facilities and activities to strengthen overall program objectives.

The target group relevant to the north-west of Melbourne catchment area included:

a) people who were at risk of relapse due a lack of social connections in spite of having previously accessed Gambler's Help services; b) regular gamblers in Melbourne's north west and inner north catchments; c) people who accessed Problem Gambling Financial Counselling services but refused referral to therapeutic counselling; and d) people with identified gambling risk who were supported through clinical and outreach services delivered through North West Mental Health.

Referral arrangements between Chrysalis Insight Inc. and all project partners were collaborative. This guaranteed a solid distribution of promotional material and led to recruitment of participants to the program. All partners developed thorough communication plans and advertisements, and the program was promoted in local government material and local media. From the outset, the collaboration with North West Area Mental Health Service opened up pathways to a different demographic of participants underrepresented in previously run programs.

Enquiries were followed up by the project manager or an experienced volunteer over the phone and/or in person. A one-on-one meeting was arranged to establish the suitability of the participant for this program. Once suitability was established, participants filled out a profile questionnaire (Appendix B) and signed a medical pre-existing conditions form (Appendix C) and an agreement to participate in a formal evaluation process (Appendix D). Often, if participants seemed very nervous about their participation, an experienced volunteer organised to meet with them informally to make them feel more comfortable about starting the program.

A formal recruitment process for volunteers was not required due to a consistently growing volunteer base from previous program attendees. The volunteer base increased by between two to three people at the completion of each program. Nonetheless, the promotional material for DTCNW advertised for volunteers, which led to recruitment of two new people who had never had an issue with problem gambling but wanted to contribute their time and skills. The role of the volunteers was the same as in the previous program versions.

The DTCNW program also introduced the role of a volunteer coordinator. The volunteer coordinator was a qualified social worker experienced in working with women affected by domestic violence as well as supporting people who have had drug and alcohol issues. The role of the volunteer coordinator entailed supervising and supporting the volunteers as well as assisting the project manager in determining selection of suitable volunteers. In addition, the role involved briefing the volunteer trainer and developing the volunteer training content (Appendix E).

During the year, three specific training days were offered to all volunteers. This training was outsourced to a training company which designed modules specifically addressing the needs of the volunteers in the DTCNW program. The training company also looked after the facilitation of the workshops. The training modules included:

- Knowledge of policies and procedures of the organisation running the program
- Identification of what it means either to be over-involved or under-involved in the volunteer role
- Values clarification about respect, confidentiality, self-efficacy, tolerance of ambiguity and difference, and self-care
- Understanding of the stress response and practice in the use of resilience tools.
 This was seen as a priority for volunteers given the emotionally laden content of their work and the potential for stressors relating to gambling to reactivate stress issues for the volunteers.
- Communication strategies used in supporting strength and autonomy in emotion laden interaction
- Strategies for deciding whether to open up or contain communication depending on volunteer role and skills, timing issues, motivation, and context
- Specific communication skills of questioning, active listening, and how to provide verbal and nonverbal encouragement
- How to seek support from the program manager or other professionals for areas outside volunteer role

The funding submission included the development of a website specific to the DTCNW participants and volunteers. The development of this website took longer than anticipated (due to a need for some extra funding) and went live at the end of August 2015. During the first few programs, when the website was not available, other communication methods were used, e.g. phone, email, text, and snail-mailing relevant information. A closed (by invitation only) DTCNW Facebook page was established, which enabled many of the participants and volunteers to communicate with each other. The use of this social media page by participants and volunteers grew, with many posting positive quotes, articles, and activities almost daily. This page also enabled participants and volunteers to inform each other if they were intending to attend a non-project event or just felt like they wanted some company. As a consequence, various small groups were established that continued to engage with each other even after the program was completed.

Participants who were still connected to a problem gambling counsellor were encouraged to continue the sessions for as long as they felt the need to do so. If concerns regarding problem gambling behaviour re-emerged (for participants and volunteers who were no longer in counselling) assistance was offered to connect them to a Gambler's Help service, and they were encouraged to re-engage in regular therapeutic counselling sessions. Due to a softer marketing strategy (i.e., 'balance what you do for fun'), a small number of participants were recruited who had never been in therapeutic counselling for their problematic gambling behaviour. During DTCNW, participants and volunteers were always made aware that available help services and referral processes were in place to engage participants with therapeutic counsellors.

Everybody participating in the program (i.e., participants, volunteers, and facilitators) was also encouraged to voice their concerns regarding other participants to the project manager or the volunteer coordinator. This may seem to be a counter-cultural strategy in the Australian context, but it was formulated and articulated at the first meeting as representing the establishment of a culture of care. Everyone was asked to accept some level of responsibility for the wellbeing of all of the other participants and volunteers. It was made clear that everyone's success was dependent on everyone working together. When a person

was 'flying under the radar' with a developing or consistent issue, their wellbeing was at risk and, in part, so was the wellbeing of others. It was not always apparent to the project manager how people were faring. Hence, the request to have everyone look out for each other was a very important part of the program.

A journal was given to each participant to record insights and comments on their progress throughout the program. This was confidential, but it was important for participants to write and clarify their thoughts and monitor their own progress.

From the start of the program participants were strongly encouraged to attend all events. Their commitment to the 10-12 week program was established before they started the program. If a participant did not attend a session without registering an apology, they were followed up. Their reason for non-attendance was explored and they were encouraged to continue the program.

From the outset participants were informed that the project was a process aimed to enable them to become self-reliant. It was made clear that the program only had a 10-12 week formal life. Any continuation of activities, with or without the group, was the responsibility of the individual. Every participant had the option to become a volunteer with the not-forprofit Chrysalis Insight Inc. and/or to join the Dare Devils social club.

Prior to commencement of the program the author collected data from a demographic questionnaire as well as organising for herself and/or a volunteer to meet interested participants. A suite of standardised measured were administered by the author pre- and post-program. Limited resources, a very short program time and the funding body did not require a qualitative evaluation.

Chapter VIII 'Discussion, Conclusions, and Applications' discusses the challenges with this short version of the program in more detail.

Evaluation Plan

The evaluation plan outlined specifics about how quantitative and qualitative data were collected. For the four studies, the author employed an independent evaluator who was engaged to analyse the collected quantitative data. The author was deeply invested in the design and implementation of the four programs and therefore could not been truly objective. Except for the first study RMM, the funding agreements did not include a qualitative component. So the author collected qualitative data in form of journal entries, notes and other communication material. However, it is important to note that the evaluation plan designs were considered as co-produced by the external team and the author. For each study, and the independent evaluator developed an evaluation plan. The plans were based on the one used in the original RMM study. Changes to each of the plans were caused by variations in duration, location, and contractual commitments requested by funding bodies. The final evaluation of the combined data and recommendations about further improvement of the model has been undertaken by the author alone.⁵ All evaluation assessment tools were administered by the author, who was also responsible for obtaining participants consent forms (Appendix D). Raw data and consent forms were held in a secure location by the author and the external evaluator. The evaluator maintained a de-identified database, while the author kept a data key for matching individual clients to evaluation data. The evaluator summarised and analysed the evaluation data and reported back to the author and the funding body. Integrated analysis of the group of studies, reported in the thesis, was the work of the author. Questionnaires were administered before the start of the program and again upon completion of the program.

The measures were selected to answer the following generic questions:

⁵ Note also that the author is responsible for program data analysis in this thesis.

- What changes were produced as a result of the program in the level of functioning, attitudes, behaviour, knowledge, and skills of individual participants judged against stated desired outcomes?
- In what ways did program activities contribute to project outcomes?
- What factors contributed to or inhibited the outcomes of the project?
- How does the program compare against standard treatment and similar interventions by other agencies?
- How accessible was the program?
- What were (if any) the negative outcomes of the program?
- How effectively did the program management arrangements work, for example consortium, internal agency, and program specific roles?
- Were there external influences that affected the program, either positively or negatively?
- Is this program transferable to other service sites, either in whole or in part?
- What modifications may have to be made to ensure the program is replicable and not relevant to the demonstration site only?
- On the basis of the evaluation findings, what can be recommended for future practice in the area of relapse prevention being addressed by the program?

The next section lists the standardised measures that were administered in the studies. These measures were selected after consultation with the author, the evaluation team, project partners, and the steering committee. At the end of each study, the effectiveness and validity of these measures were discussed and, depending on findings, some were not administered and/or others were added for the next program. The complete standardised measures questionnaire is listed in (Appendix F).

Measures (Scales and Indices)

For clarity, he following descriptions draw heavily on the formal definitions and descriptions of the given measure.

TrakCare (Office of Gaming and Racing, 2009). This was the management information system used by the Victorian Department of Justice to assess the performance of Gambler's Help services at the time that the programs were offered. The core of this system was The Minimum Data Set (MDS). This recorded registration data, demographic, and session information, and assessment data, such as client gambling activity, ideation, severity, depression and anxiety, level of functioning, and alcohol and substance abuse.

Gambling Activity Measurement Tool (GAMT). This assessment measured the frequency in time, number of sessions, and also the amount of money lost from the primary gambling activity. This measure also asked if this amount was a typical fortnight for the client and, if not, what would be a typical fortnight in terms of hours, sessions, and dollars lost. It was a Departmental measure and not a standardised clinical or research tool.

Gambling Ideation Scale (GIS). This is a single question that asked 'over the last fortnight, about how much of the time would you say that you spent thinking about gambling?' There were five response options, namely, 'None of the Time', 'A little of the time', 'Some of the time', 'Most of the time' or 'All of the time'.

Problem Gambling Severity Index (PGSI: J. Ferris & H. J. Wynne, 2001). The

PGSI is a subset of items in the Canadian Problem Gambling Inventory. The PGSI was developed as a measure of gambling problems in the general population rather than providing a clinically-based diagnosis of pathological gambling. It consists of nine questions which assess the domains of problem gambling behaviours and adverse consequences. Participants are classified as being a non-problem gambler or non-gambler, low risk gambler, moderate risk gambler, or a problem gambler. More information about the PGSI can be found in the 'Screening and Assessment tools' section. Kessler 6 (K6: Furukawa, Kessler, Slade, & Andrews, 2003). The K6 scale is a quantifier of non-specific psychological distress comprising six items. The items originate from Item Response Theory (IRT) and were initially developed from pilot survey results. It has demonstrated excellent internal consistency and reliability (Cronbach's α =0.89). It also demonstrates consistent psychometric properties across major sociodemographic subsamples and strongly discriminates between community cases and non-cases of DSM-IV/ SCID disorders. Each of the six items on the questionnaire are rated by the respondent on a five-point scale whereby the total score is the unweighted sum of item responses (responses range from 0 - "none of the time" to 4 - "All of the time"). Thus, the range of responses is 0-24. Using the K6, respondents are classified as being at low, moderate, high, or very high risk.

Work and Social Adjustment Scale (WSAS: Marks, 1986). The Work and Social Adjustment Scale (WSAS) is a self-report scale of functional impairment attributable to an identified problem. The WSAS is a simple, reliable, and valid measure of self-reported functional impairment. Marks et al. (2002) reported that patients readily understood the functional domains assessed and easily provided the numeric ratings. Scores are stable over intervals of at least two weeks, in the absence of intervention or treatment, and robust across different modes of administration. Similar results across two DSM-IV disorders for discriminating between patients categorised by symptom severity suggest that the WSAS may be a valuable measure for making comparisons between disorders (Mundt, Marks, Shear, & Greist, 2002). A WSAS score of more than 20 appears to suggest moderately severe or worse psychopathology. Scores between 10 and 20 are associated with significant functional impairment but less severe clinical symptomatology. Scores below 10 appear to be associated with subclinical populations.

Temptations for Gambling Questionnaire (TGQ: Holub, Hodgins, & Peden, 2005). The TGQ is a 21-item self-report scale which measures the strength of urges to

gamble in a variety of potentially high-risk situations. The TGQ has been found to have very good reliability, with factor scores ranging from .80 to .91 and test-retest reliability coefficients ranging from .90 to .92. Preliminary data support the validity of the TGQ as a measure of gambling urges.

The Rosenberg Self-Esteem Scale (RSE: Robins, Hendin & Trzesniewski, 2001). This is a widely used self-report questionnaire comprising 10 items that are used to generate a global self-esteem score. The RSE displays high internal consistency ($\alpha = .82$) and item-total correlations in the upper range (r > .50) (Holub et al., 2005).

General Self-Efficacy Scale (GSE: R. Schwarzer & M Jerusalem, 1995). Selfefficacy measures an individual's sense of personal efficacy in light of a broad range of stressful and challenging situations. More specifically, items measure a respondent's confidence in their use of skills to resist temptation, cope with stress, and mobilise resources required to meet situational demands. In a summary of 25 studies and 19,120 participants, it was found to have a reliability alpha of .86 (Schwarzer & Jerusalem, 1995).

de Jong Giervald Loneliness Scale (LS: de Jong Giervald & van Tilburg, 1999). This is an 11-item scale based on a cognitive theoretical approach to loneliness. Characteristic of this approach to loneliness is the emphasis on the discrepancy between what one wants in terms of interpersonal affection and intimacy, and what one has. The greater the

discrepancy, the greater the loneliness. Typically, scale reliability in the 0.80 to 0.90 range is observed (Shaver & Brennan, 1991).

Client Experience Questionnaire (CEQ; PGRTC). The CEQ was developed by the Problem Gambling Research and Treatment centre was used. This questionnaire included questions on client processes and outcomes. Alternatively, if the CEQ was unavailable the client/patient satisfaction scale by Larsen (de Jong & van Tilburg, 1999) was used. **Help seeking.** These questions examine counselling history prior to treatment. The following questions were asked: 1) Are you currently receiving counselling for problem gambling; 2) How many counselling sessions have you attended (number, frequency); and 3) have received any additional support from gambling?

Adult Measure of Behavioral Inhibition (AMBI: Gladstone, & Parker 2005). The AMBI was designed to measure the temperamental tendency of an individual to respond to social novelty and risk stimuli with inhibition and avoidance. Three of the four subscales were used in the current study: Fearful Inhibition (a tendency to respond with wariness, hypervigilance, and withdrawal and by becoming physically anxious in response to novel social situations); Non-approach (describes interpersonal reticence and lack of spontaneous social approach or involvement); Low Sociability (describing a preference for one's own company, solo leisure activities, and quiet social events). Questions are worded either positively or negatively for inhibition and are rated on a 3-point scale (i.e., 0 = ``no/hardlyever", 1 = "some of the time", and 2 = "yes/most of the time"), and subscales scores are computed by summing relevant items. Higher total scores reflect a greater degree of inhibition, and higher subscale scores reflect a larger presence of the particular component of inhibition being measured by each subscale. The AMBI has displayed excellent test-retest reliability and displays convergent validity with measures of introversion, social anxiety, and avoidant personality. It has also been shown to discriminate between anxious and depressed groups, as well as between depressed and control groups.

Depression Anxiety Stress Scales 21 (DASS: Lovibond& Lovibond, 1993). The Depression and Anxiety subscales of the DASS-21 were designed to measure levels of depression and anxiety in non-clinical populations. Each subscale contains seven statements, and respondents are asked to indicate the degree to which each has applied to them over the past week. Example items include 'Over the past week I felt that I had nothing to look forward to' and, 'Over the past week I felt scared without any good reason'. Responses are made on a five point scale ranging from (0) almost never/never, to (4) almost always/always, with higher scores indicating the presence of greater symptomatology. The DASS-21 subscales display excellent internal consistency (Cronbach's $\alpha = .97$ and .92 for the DASS-D and DASS-A, respectively), and have been found to correlate strongly with other established measures of depression and anxiety.

The following Table 9 contains a list of the different validated measures which were administered for Study 1: (Re)Making Meaning (RMM); Study 2: MoreConnect 1 (MC1); Study 3: MoreConnect 2 (MC2); and Study 4: Dare To Connect north west Group 1-6 (DTCNW). Note that, because of administrative and other difficulties in the conduct of each version, it was not possible successfully to administer each measure uniformly. This was especially the case with the small MoreConnect 2 (MC2) (Study 3), as explained earlier in this chapter.

Table 9

Measures	Study 1	Study 2	Study 3	Study 4
Trakcare	Х			
PGSI				Х
Kessler 6	Х	Х		Х
Dejong Giervald Loneliness	Х	Х		Х
Gambling Activity Measurement Tool (GAMT)	Х	Х		Х
Gambling Ideation Scale (GIS)	Х			
Work and Social Adjustment Scale	Х	Х		Х
Temptations for Gambling Questionnaire	Х	Х		Х
Client Experience Questionnaire	Х	Х		
The Rosenberg Self-Esteem Scale	Х	Х		Х
General Self-Efficacy Scale	Х	Х		Х
de Jong Giervald Loneliness Scale	Х	Х		Х

Readiness to Change Questionnaire	Х	Х		
Help Seeking	Х	Х		
Adult Measure of Behavioural Inhibition				Х
Depression Anxiety Stress Scales 21				Х
Alcohol and Drug Use			—	

CHAPTER VI

Research Results

This chapter will present the findings in sequence relevant to the research questions. Recall from previous chapters that the duration of the program applications (versions) varied, and so did some of the social activities, the educational workshops and the management structure. This was caused by the varied funding contract requirements. It is important to note, though, that all of the activities of the start-up weekend of the four program versions were modelled on the activities designed and implemented for the first program, RMM (Study 1).

The educational workshops sessions on conflict solving, communication skills, goal setting, neuro-plasticity, relaxation techniques, physical wellbeing, and the importance of looking after your overall wellbeing were also incorporated in all four programs. Therefore, even though many aspects of the original RMM pilot program content design were replicated, the differences in duration, funding, and location were reflected in the findings.

Quantitative Findings

Demographic data. Table 10 lists the general demographic and the counselling status of the participants of the four studies.

Table 10

	Study 1	Study 2	Study 3	Study 4
	RMM	MC1	MC2	DTCNW
Participants	30	16	10	62
Female	21	12	7	31
Male	9	4	3	31
Receiving counselling at the time	28	11	8	31
No counselling at the time	2	5	2	31

Overview of Demographics Studies 1-4

However, Table 11 is more relevant. It lists demographic data for the participants in the three program versions for which the measures in Table 9 applied, namely Study 1: (Re)Making Meaning (RMM); Study 2: MoreConnect 1 (MC1); and Study 4: Dare To Connect north west Group 1-6 (DTCNW). In particular, and despite some noticeable gaps, it describes participants as mainly older, unpartnered EGM users. To avoid repetition below, it is worth noting now that the subsequent data analysis revealed no significant differences by any demographic category between pre and post-test measures of any scale in Table 9.

Table 11

		REMAKING	MORE	DARE TO
		MEANING	CONNECT 1	CONNECT
Gender	Male	30%		51%
	Female	70%		49%
	Total	100%		100%
Age group	<25	0%		0%
	25-30	3%		7%
	31-40	7%		15%
	41-50	13%		17%
	51-60	53%		30%
	>60	23%		32%
	Total	100%		100%
Marital status	Single			46%
	Married or par	rtnered		15%
	Divorced or se	eparated		23%
	Widowed			15%
	Total			100%
Referral from	Yes		85%	54%
Gambler's Help	No		15%	46%
	Total		100%	100%

Detailed Demographic Data Studies 1, 2, and 4

Currently receiving	Yes	93%	77%	52%
problem gambling	No	7%	23%	48%
counselling	Attending other			
	counselling	0%	0%	0%
	Total	100%	100%	100%
Primary form of	Pokies	71%	91%	73%
gambling?	TAB	25%	9%	13%
	Casino	0%	0%	4%
	TAB and pokies	4%	0%	8%
	All	0%	0%	2%
	Total	100%	100%	100%

Tests. The simple objective of the quantitative analysis was compare how participants scored according to key scales (measures) after completing the program to how they scored before starting. That is, the aim was to test paired data for each participant. For all studies, the Wilcoxon Signed Ranked test was used to assess changes from baseline (pre) to program finish (post). The non-parametric Wilcoxon Signed Ranked is the appropriate test because the data (by scale measure and by program version) were not, in most cases, normally distributed. It also allowed for small numbers of pairs (>5 by some accounts). Normality is a formal condition for the standard, parametric, t-test. However, that said, the t-test is quite robust, so t-test significance results are presented as well. As will be seen, the significance results differ little between the Wilcoxon and t-tests.

The Wilcoxon and t-tests analysed only those pairs with a post program measure, thus obviating the need to apply some arbitrary assumption to accommodate missing post program values. This approach was deemed appropriate because the aim here was to test the effects on those who chose to participate *and complete* the programme: in effect, an 'enumeration sample' of discrete before and after pairs. Moreover, because of this, it was also deemed appropriate to regard statistical significance, which confounds both effect and the number of

pairs (or, in a sampling exercise, sample size), as a useful but incomplete indicator. Hence, in the analysis below, emphasis shifts to effect size (raw, as in percentage change in means or mean difference, and in using a statistical measure). The effect size measure appropriate for the Wilcoxon test used below is conservative, namely:

Effect size = Z (standardised test score) $\div \sqrt{2}$ times n (number of pairs)

The effect size was then evaluated according to Cohen's criteria, namely 0.1 (small effect), 0.3 (medium effect), and 0.5 and more (large effect; Pallant, 2007). Given the objectives of the program overall, following measures (see above) have been highlighted for analysis below:

- PGSI (gambling severity)
- Temptations for Gambling Questionnaire (risk of lapse, relapse)
- Work and Social Adjustment Scale (functional impairment)
- The Rosenberg Self-Esteem Scale (self-esteem)
- Kessler 6 (psychological distress)
- General Self-Efficacy Scale (efficacy in coping with stress, temptation etc.)
- de Jong Giervald Loneliness (social connectedness)
- Adult Measure of Behavioural Inhibition (social connectedness)
- Depression Anxiety Stress Scales (non-clinical stress and anxiety)

Preliminary, RMM at six and 12 months. Figure 8 reproduces Figure 2 from the preliminary analysis of the RMM (Study 1). Study 1's duration was 12 months, so the early assessment provided a solid first indicator of the efficacy of the program approach. The results were published as 'Leisure Substitution and Problem Gambling:

Report of a Proof of Concept Group Intervention' in the *International Journal of Mental Health and Addiction* (Jackson et al., 2012).⁶ In particular, note the relevant measures (Temptations for Gambling Questionnaire, Work and Social Adjustment Scale, Rosenberg Self-Esteem Scale, Kessler 6, and de Jong Giervald Loneliness). The proportionate changes in the mean scores from the baseline (pre) to six months are large for a number of the measures. The authors (Jackson et al., 2012) also tested the measures at 12 months and concluded:

Participants who completed at least one follow up survey (n=21) were compared to those who only completed baseline measures (n=9). There were no differences on demographic measures, however, those who did not complete follow up measures had lower scores on the PGSI (Mean 12.4 compared with Mean 18.1; F=2.26, t (26)=2.35, p=0.026) and the WSAS (Mean 13.9 compared with Mean 25.4; F=0.13, t (26)=2.14, p=0.023). These results indicate that people who left the program were less severe in terms of problem gambling and its impacts, at program commencement than those who continued with the program. A repeated measures t-test was used to asses change from baseline to 6 months (Figure 8) and between 6 months and 12 months. For all psychological measures (temptation to gamble, self-esteem, anxiety, and loneliness) there was a significant improvement from baseline to 6 months. At 12 months there was a reduction in scores on the Temptation to Gamble Scale (mean change 13.6 units; t(14)=2.53, p=.024), suggesting that participants were less tempted to gamble at 12 months than 6 months. The other scales suggested that improvement observed at 6 months was maintained.

⁶ The author was a co-author of this article

		Baseline		e 6 months		Change		Repeated measures t-test		
	n	Μ	SD	Μ	SD	Μ	SD	t	df	sig
Temptation to gamble (0–105)	20	62.50	28.15	36.55	26.02	25.95	26.19	4.431	19	.000
Negative affect (0-45)	20	28.40	11.88	16.20	11.56	12.20	11.34	4.811	19	.002
Positive mood (0-25)	20	13.25	6.93	8.10	6.32	5.15	6.39	3.603	19	.002
Money chasing (0-20)	20	11.90	6.73	6.55	5.39	5.35	6.63	3.610	19	.002
Social factors (0-15)	20	8.95	4.47	5.70	4.21	3.25	3.77	3.857	19	.001
WSAS (0-40)	18	25.33	11.97	12.83	13.24	12.50	13.13	4.039	17	.001
Rosenberg Self esteem (0-30)	17	12.94	5.73	18.00	6.41	-5.06	5.27	-3.955	16	.001
K6 (6-30)	17	18.29	4.28	12.24	5.47	6.06	4.58	5.460	16	.000
Loneliness (1-11)	19	8.63	2.85	6.05	3.81	2.58	3.27	3.436	18	.003

Table 2 Comparison of scores at baseline and 6 months (N=20)

Figure 8. Preliminary analysis of (Re)Making Meaning program version at six months

Analysis. Tables 11 and 12 draw together the essential data. Table 11 describes the basic paired data (n, means, mean differences, etc.). Table 12 describes the test data for each of the measures, together with the corresponding effect sizes. Note that the sub-programs of DTCNW have been combined for analysis.

Note also that an aggregated category for all paired data for all program versions, 'All aggregated', is included. However, given the different lengths and other differences between each version, not much weight should be accorded to it. If anything, it just offers a crude descriptive summary. Focus instead should be on the program version findings.

Following the discussion of these findings, this section will conclude by summarising what we can conclude about program length. This, of course, will be one important indicator for future policy development and program implementation. Table 12

Basic Data for Each Scale Measure

	PGSI	Temptation	Work	Rosenberg	Kessler 6	General	Loneliness	AMBI	DASS
		to gamble	and	self-		self-	scale		
			social	esteem		efficacy			
			impact						
			of						
			gambling						
REMAKING MEANING (n pairs) 0-12		16	14	12	14	15	12		
months		10	14	15	14	15	15		
Mean at start of program (standard			22.5		17.8	26.5			
deviation)		57.6 (34.6)	(12.2)	13.6 (6.4)	(4.8)	(3.8)	9.1 (2.6)		
			11.4		13.7	29.5			
Mean at end of program (standard deviation)		21.5 (22.1)	(14.0)	17.0 (7.4)	(6.8)	(6.3)	6.4 (4.1)		
			11.1						
Mean difference (standard deviation)		36.1 (42.7)	(13.6)	-3.4 (3.5)	4.1 (5.5)	-3.0 (4.2)	2.7 (2.9)		
% mean difference		-62.7%	-49.2%	24.9%	-22.9%	11.3%	-29.7%		
MORE CONNECT 1 (n pairs) 0-6 months		8	8	8	8	8	8		
Mean at start of program (standard			26.3		21.1	25.5			
deviation)		62.3 (16.8)	(10.6)	11.0 (4.5)	(4.7)	(7.4)	10.3 (1.2)		

TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS

			15.9		15.6	29.0			
Mean at end of program (standard deviation)		40.3 (33.1)	(14.0)	17.1 (7.3)	(7.3)	(6.9)	6.3 (3.9)		
			10.4						
Mean difference (standard deviation)		22.0 (32.1)	(10.5)	-6.1 (5.5)	5.5 (5.6)	-3.5 (4.7)	4.0 (3.6)		
% mean difference		-35.3%	-39.5%	55.7%	-26.0%	13.7%	-39.0%		
DARE TO CONNECT (n pairs) 10-12	27	41	42	41	41	42	41	42	40
weeks	57	41	42	41	41	42	41	42	40
Mean at start of program (standard	19.0		19.9		16.8	26.7		14.1	26.5
deviation)	(4.9)	71.2 (23.2)	(10.7)	14.2 (4.3)	(5.6)	(5.5)	7.2 (2.4)	(5.1)	(13.0)
	17.0		15.2		13.8	28.7		12.9	18.9
Mean at end of program (standard deviation)	(5.3)	56.5 (22.0)	(11.2)	16.5 (3.2)	(4.6)	(3.6)	6.5 (2.9)	(4.2)	(12.0)
			4.7						7.6
Mean difference (standard deviation)	2.0 (4.3)	14.7 (23.3)	(10.7)	-2.4 (3.1)	3.0 (4.0)	-2.1 (4.0)	0.7 (2.0)	1.2 (3.8)	(11.4)
% mean difference	-10.5%	-20.7%	-23.8%	16.7%	-17.6%	7.8%	-9.8%	-8.5%	-28.7%
ALL AGGREGATED (n pairs)	37	65	64	62	63	65	62	42	40
Mean at start of program (standard	19.0		21.3		17.6	26.5		14.1	26.5
deviation)	(4.9)	66.8 (26.1)	(11.0)	13.6 (4.8)	(5.4)	(5.4)	8.0 (2.6)	(5.1)	(13.0)
	17.0		14.5		14.1	29.0		12.9	18.9
Mean at end of program (standard deviation)	(5.3)	45.9 (27.6)	(12.1)	16.7 (4.9)	(5.5)	(4.7)	6.4 (3.2)	(4.2)	(12.0)
			6.8						7.6
Mean difference (standard deviation)	2.0 (4.3)	20.9 (31.0)	(11.6)	-3.1 (3.7)	3.5 (4.6)	-2.5 (4.1)	1.5 (2.7)	1.2 (3.8)	(11.4)

% mean difference	-10.5%	-31.3%	-32.1%	22.5%	-20.1%	9.3%	-19.4%	-8.5%	-28.7%

Table 13.

Test statistic and effect size data for each scale measure

	PGSI	Temptation	Work	Rosenberg	Kessler 6	General	Loneliness AM	BI	DASS
		to gamble	and	self-		self-	scale		
			social	esteem		efficacy			
			impact						
			of						
			gambling						
REMAKING MEANING (n pairs) 0-12		16	14	12	14	15	12		
months		10	14	15	14	15	13		
Effect size = $z/\sqrt{(2n)}$ Wilcoxon		0.5	0.5	0.6	0.4	0.4	0.5		
Effect according to Cohen's typology		Strong	Strong	Strong	Medium	Medium	Strong		
Asymp. Sig. (2-tailed) Wilcoxon		.005	.017	.003	.022	.015	.010		
Significance using paired sample t-test (CI									
95%)		.004	.009	.004	.016	.016	.006		
MORE CONNECT 1 (n pairs) 0-6 months		8	8	8	8	8	8		
Effect size = $z/\sqrt{(2n)}$ Wilcoxon		0.4	0.5	0.5	0.5	0.4	0.6		
Effect according to Cohen's typology		Medium	Strong	Strong	Strong	Medium	Strong		

TARGETING PROBLEM GAMBLING RELAPSE RISK FACTORS

Asymp. Sig. (2-tailed) Wilcoxon		.123	.058	.035	.035	.075	.018		
Significance using paired sample t-test (CI									
95%)		.094	.027	.016	.028	.074	.016		
DARE TO CONNECT (n pairs) 10-12	27	<i>A</i> 1	40	<i>A</i> 1	<i>A</i> 1	12	<i>A</i> 1	42	40
weeks	57	41	42	41	41	42	41	42	40
Effect size = $z/\sqrt{(2n)}$ Wilcoxon	0.3	0.4	0.3	0.5	0.4	0.3	0.2	0.3	0.4
Effect according to Cohen's typology	Medium	Medium	Medium	Strong	Medium	Medium	Medium	Medium	Medium
Asymp. Sig. (2-tailed) Wilcoxon	.006	.000	.003	.000	.000	.002	.026	0.008	0.000
Significance using paired sample t-test (CI									
95%)	.008	.000	.007	.000	.000	.002	.026	0.049	0.000
ALL AGGREGATED (n pairs)	37	65	64	62	63	65	62	42	40
Effect size = $z/\sqrt{(2n)}$ Wilcoxon	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.4
Effect according to Cohen's typology	Medium	Medium	Medium	Strong	Medium	Medium	Medium	Medium	Medium
Asymp. Sig. (2-tailed) Wilcoxon	006	000	.000	000	.000	.000	.000	0.008	0.000
	.000	.000	.000	.000	.000				
Significance using paired sample t-test (CI	.000	.000		.000	1000				

In all program versions and for each measure the effect size recorded in Table 13 is in the medium-strong range according to Cohen's typology applied to the Wilcoxon test (Pallant, 2007). The mean difference and percentage mean difference data in Table 12 present the underlying reason for the medium-strong effect size results. That is, the straightforward differences from pre-intervention to post-intervention in all the key measures are plain to seen. Similarly, most p-values, Wilcoxon and t-test, are significant at the 95% confidence level. The only instances with non-significant p-values occur in the MoreConnect 1 version (Study 2). These sit oddly against medium and strong effect sizes and can be attributed to the confounding effect of the small number of pairs (n=8).

In short, the test data confirm efficacy of the three program versions in the critical dimensions of social connectedness, self-esteem and efficacy, stress, and, crucially, risk of gambling lapse and relapse. These results were independent of, which is to say in addition to, whether the participants were currently receiving counselling for their gambling or not. No significant differences were detected on any of the scale measures according to counselling status. That is, each of the program versions added value in its own right.

Consistently with the six versus 12 month comparisons within the preliminary analysis (Jackson et al., 2012), of Study 1 (RMM), analysis here confirmed little difference in effect between the 12 month RMM six month MC1. Indeed, the differences in effect on all of the scales except 'Temptations for Gambling Questionnaire', which highlights risk of lapse and relapse, were not significant between all three program versions. That is, on all scales except that measuring temptation to gamble, there were no significant differences between RMM, MC1, and DTCNW. In other words, on these measures, each was as effective. Again, the data were analysed using both non-parametric (Kruskal Wallis) and parametric (GLM repeated measures, with program versions as between subjects factors) tests. Significantly, however, the length of the program did make a difference to the temptation to gamble. In the first instance, the difference between the 12 month RMM and six month MC1 was tested. There was a difference favouring the longer program (see Table 12), but the difference was not significant.⁷ However, the temptation to gamble measure difference between the combined longer programs (RMM plus MC1) and the shorter 10-12 week DTCNW was significant at the 95% confidence level.⁸ The length of program does make a difference between six months and 10-12 weeks.

⁷ Kruskal Wallis comparison of groups (RMM and MC1) pre (p=0.854), post (p=0.177). GLM between subjects factors (RMM and MC1) F=0.813, p=0.192.

⁸ Kruskal Wallis comparison of groups (RMM plus MC1 against DTC) pre (p=0.072), post (p=0.001). GLM between subjects factors (RMM plus MC1 against DTC) F=016.177, p=0.001.

Qualitative Findings

This chapter introduces the qualitative findings of this research. It represents the views and perspectives of participants and volunteers of the relapse-focused model. It strives to utilise multiple sources of evidence to support the data presented in the quantitative findings. Participants' experiences were expressed in semi-structured interviews, testimonials, written letters, and through art.

Study 1: RMM. In Study 1, RMM, interviews were conducted by the project evaluation team with the program participants and volunteers of this study in a group interview format at the final event held at Eastern Community Health, Melbourne shortly after the 12-months program was completed. The project staff and management were excluded from these discussions.

The discussions followed a semi-structured interview format in which the following main questions were asked:

What were your initial impressions of the program? What was your experience of the program? How useful was the program? What did you learn? Name something that worked well and name something that did not work well and what sort of person would benefit most from the program?

The volunteers/support people were asked similar questions but with a stronger focus on their interactions with the participants and project worker. Both group interview sessions were tape-recorded, and verbal consent was obtained from the participants and volunteer support staff. The bolded and italicised words are considered to be major themes drawn from these conversations.

The dominant theme taken from these conversations was a general sense of increased self-development and confidence for both the participants and volunteer support people. Participants reported improved courage, self-esteem, hope, and connections with their communities and purposefulness in their lives. Volunteer support people expressed similar feelings. Importantly, participants indicated that these feelings of empowerment were translated into a greater sense of control over their gambling. The following quotes indicate the level of change that some of the participants experienced. The square brackets indicate a surmised meaning from the discussions that were not explicitly articulated:

"I joined a bush walking club, started studying again, completed an HR diploma, doing another next, rejoined my church after a number of years and bought an investment unit ... I've really made a lot of changes."

"Addiction is so powerful ... [the program] helps with my addictions ... helps with relapse ... I do not beat myself up or [believe] that I'm a worthless person."

"My counsellor said this year you've gone ahead in leaps and bounds." "It's been a really positive experience."

These sentiments are echoed by the volunteer support people. They reported seeing a lot of change in the participants, most notably in terms of them becoming more forthcoming, confident and integrated in society. For example:

"[I've seen a] change in attitude ... a lot were fearful ... now they come to you with their arms out."

"They have gained confidence ... there is a bonding [and] confidence gained from going outside the group."

"More courage in both participants and volunteers."

"It's been good for myself and my friend."

Participants and support people indicated that the social aspect of the program was very enjoyable and important to participants' success. Some indicated that they had joined groups outside of the program, re-connected with parts of their lives that had been neglected, and generally enjoyed the activities. Some of these events were new to the participants and even required them purchasing their own equipment, for example, a computer.

These discussions demonstrated that clients had developed new interests that could be explored together in a safe, positive environment. This had an effect of broadening their experiences, most importantly in a non-gambling context. Participants reported that having something to look forward to had helped them to manage their time, rather than thinking about entertaining themselves with gambling.

"[I] do not feel so guilty ... so many people in the same boat ... you're not alone ... [the program has a] non-judgemental [feeling]... [I get feelings of/there were feelings of] acceptance."

"[I could] plan for it instead of going out gambling on Saturday ... we went to the program."

"Social activities we as good as the educational activities ... a bit of both [was good] ... [we were] looking forward to see[ing] each other ... you know you were among friends [in this group]."

People who left the group before the program was completed still benefited from the introduction to other activities and people. Here is one of the emails from a participant who dropped out after attending the weekend and three follow-up sessions.

April 13, 2010

Thank you for inviting me into your (Re)Making Meaning group and the fantastic weekend away you organised for us all but I feel it's time I stand on my own two feet and start doing things I've missed in the last few years. Here are some of the reasons for my decision:

After putting in a 9-10 hour day at work I find it hard to get motivated and physically challenging to go out again at night as I have to be up at 5:15am to be at work for 7am.

I've enrolled in a University Course for Creative Writing for Semester 2 and this will take up the few spare hours I will have each week after my mum returns from Canada in a few weeks' time for a 15 month stay. If it works out I may do a degree after this.

I applaud your effort and am grateful to have been a part of it but now I'm making my own "meaning" and I am moving forward with my own plans." (Participant ID 23)

The following are examples of other non-structured activities, as communicated to the author, in which people partook during the program which highlighted the change and responsibility to engage in other activities that they developed as a result of the program:

- Two participants got together on a Sunday and drove up to a cafe in Hurstbridge near Melbourne to visit another participant who was working there. They had a drink and a chat with her after she finished work.
- A female participant who came from a suburb approximately one hour of travelling time away from the meeting place to most of the events was offered, took up accommodation at one of the volunteer's houses so that she did not have to catch the train late at night.
- Two male participants decided to go to the movies together and said that they would try to do this more often.
- Two female participants tried belly dancing offered free at a library.

- One of the participants noticed that a number of the people who had just obtained computers did not quite know how to use them and offered to hold a session at her house. Two of the computer-literate participants visited others to help them access the networking site.
- After Monday's computer course, two to three participants/volunteers went out for lunch regularly.
- One participant enrolled in a couple of other courses at the university for 2011.
- A small working bee helped one of the participants move house.
- One of the female participants who brought a friend along to one of the events was asked by her friend afterwards: "What do I have to do to join this group?" She attended events afterwards.
- A participant advertised on the website that she would like some company on a Sunday afternoon and would provide soup for dinner. The offer was taken up by a couple of participants who had a great afternoon.

Reference Group. This section entails the responses of a semi-structured interview conducted with the reference group of RMM at their final meeting at Eastern Community Health. The group discussion was recorded, transscribed and analysed by the independent evaluator and author.

The following questions were asked:

Did the project meet expectations? Were the organisational arrangements appropriate? How would you run the project if you had the chance to do it again? What have you learned about the delivery and form of the implementation and what advice do you have about a possible state-wide roll-out?

The reference group comprised agency and external personnel who provided ongoing advice and monitoring for the project. All clinical members of the reference group were directly involved with the selection of appropriate participants. Again, a major theme from these discussions was that clients appeared to have made many changes in their lives, and the members noticed a significant increase in participants' self-belief and self-development. Clients were reported as having a wider range of interests and greater awareness of a number of alternatives to gambling. The reference group members made comments suggesting that participants showed a clinically significant improvement with respect to abstinence, with most remaining abstinent for the entirety of the program, with some joining additional recreational groups and signing up to self-exclusion programs on their own. For example:

"[The clients] appear very positive although [some are] still having issues with their lives."

"[The] clients learnt a significant amount and have come a long way."

"[The] clients [appeared to] learn how to plan and [seemed to] look forward to the next event."

The reference group members also spoke about the significant commitment of the clients to the project. They spoke about a generally high level of client attendance at events, the instances of clients arranging a funding event, and clients purchasing items with their own money for the program. These sentiments were associated with a high level of respect for the project worker and the program. Notably, members reported that clients wished to support the program:

"Everyone was able to contribute."

"Clients felt it was a privilege to attend [the program] then later wanted to contribute, for example, at the celebration weekend."
The reference group agreed that the social aspect of the project contributed to its success. Members reported that clients and support people seemed to integrate effortlessly, with no distinctions made between the two groups. There was some discussion that the inclusion of the support people may have focused the discussions between attendees away from gambling. Members also thought that the weekends were critical to the group bonding, as were the projects the attendees worked on. The idea of group cohesion was seen as important as well:

"[The] group became locked at the first weekend."

"[The] group experience was important."

"The group grew stronger [as the program progressed]."

Another theme that emerged was that the screening process for program eligibility was an important factor. Clients were typically already receiving counselling or were seeking treatment. The assessment criteria were social isolation and the likelihood of staying in the program for the duration of the program. Reference group members suggested that this process needed to be managed, perhaps via three-monthly reviews of participants, whereby specified criteria could be discussed by management, the project worker, and clinicians.

The project was deemed a success and exceeded the author's expectations. The oneto-one buddy system was thought to be unnecessary, although the presence of a few positive support people was thought to be essential for the development of a non-gambling social group. It was conceded that the assumption of socially isolated people being able to bring a support person to the program was flawed, although this appeared to have no negative effect on the outcome of the program. The monthly meetings of the reference group were thought to be positive for management to review the process of the program, as was the 10-12 month program duration, so the initial gains made by the clients could be consolidated. The quality of the project worker was considered a key element in the program. Success was thought to be due, in part, to the passion and energy of the project worker.

Connections with community services and other support agencies, interpersonal, and project management skills were thought to be critical. It was thought that future roll-outs of the program should employ a project worker full-time and that an increase in funding was necessary, as clients had to finance some events themselves, and this might not be a reasonable assumption in other contexts. The presence of the therapeutic counsellors was thought to be important, especially at the initial weekend retreat, as some clients may find social situations intimating. The senior clinician reported that regular interface between the counsellors and the project worker was essential for the management of client issues.

The participants showed significant improvement across all psychological indices, while half were abstinent from gambling for the duration of the project. Although there was a modest increase in gambling losses as a group (primarily due to one person who lost a significant amount at the end of the program and reported this as a relapse), there was a substantial decrease in the hours spent gambling.

Participants and volunteer support people reported enjoying the events and appreciated the opportunity to contribute to the program (Appendix G, sample of events evaluation). Indeed, participants wished that the program could continue for the sake of others and wanted to impart their experiences to future participants. Counsellors reported striking changes in the clients' self-expression and engagement with the community. What was considered the most innovative component in this project was that it addressed social isolation with non-gamblers in a social context. Previous research has suggested that gamblers, and problem gamblers in particular, although socially isolated, are members of social contexts where gambling is considered a normal recreation activity (Trevorrow & Moore, 1998). The addition of non-gamblers in a leisure substitution approach seemed to have normalised non-gambling activities.

Study 2: MC1. From the outset, participants were informed that the program was aiming for self-sustainability. Throughout the project, it was emphasised that participants needed to take increasing responsibility for their own new lives. Because this group was relatively small in numbers, it was easier to observe. Through semistructured and unstructured interviews, it was possible to consider the success of this model for the individual. During the last week of March 2012 (mid-project), the project manager conducted interviews with 12 participants to explore the following questions:

What were the activities they were involved in before MoreConnect 1? What activities did they pick up since their involvement since starting the MoreConnect Program 1? Is there anything else that they have changed since starting the program? Had the MoreConnect Program impacted on their relationships (e.g., Parents, children, friends, etc.)? What did they think were the most important components of the MoreConnect Program? Was there anything that they did not like about the MoreConnect Program?

Except for problem gambling support groups, none of the participants was involved in any other activity before starting the MoreConnect program. At completion of the program, all participants were either actively involved in one or more activities or were actively looking to find something in which they were interested. Two of the participants enrolled at university to complete a tertiary enabling program. Two participants and one volunteer were attending social events organised from a different group for people over 50 years old. Two participants joined the library, and two were volunteering for a charity. Four participants had joined a choir, and three were engaged in a creative writing class organised by the local community house.

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Most participants reported improved relationships with their family and others as a direct result of the MoreConnect program. The most important element for all participants interviewed was the initial join-up weekend, which they thought was vital for securing social bonds.

Most participants reported feeling more confident and positive and were very happy they made the decision to get involved. Comments like: "I tried things I never thought of and I actually liked doing them", were made often. Expressions such as belonging, feeling valued, had not been laughing like this for many years, and being excited about the future indicated that their focus had shifted. The aim of not to gamble was no longer their focus. Rather, their focus had shifted to "what can I do now that is fun and exciting, so that I do not feel the need to go and gamble?"

The following two participants' stories demonstrate the positive impact the program had on two of the participants. They are unique expressions of two people's journeys through the program. Their positive program experience is representative of that of the other participants. Both of the participants benefited from being a part of the program and were happy to put their thoughts about their journey in writing. The participants have given permission for their actual first names to be used in talking about their involvement in the MoreConnect 1 program and to publish their comments as appropriate.

Sue. The first participant, Sue, wrote a letter to express her experience of the journey. Sue also led the ongoing social group Dare Devils and had been very proactive in joining other groups and activities. She had joined another over 50s social group, goes ballroom dancing on a Monday, and is taking part in a newly formed choir at the Nicholson Street Community House. Before I started the MoreConnect Programme I feared everything. People, Places, achieving failing, making decisions and many other things. I feared life. I was isolated. I did not have friends because I had thoughts that everyone was bad, I did not go anywhere for fear that something bad would happened, I did not do anything because I had no motivation. All I managed to do was go to work and come home. And gambling. Nothing else. I was in a very dark place. Words can not express how low I felt. But now since joining the group I have come up on leaps and bounds and felt that I have become a different person. I have found that you need friends, you need to be social and active and nothing is to be feared. In the process of finding all this I am starting to realise who I am. I enjoy having fun, I enjoy friendships, I enjoy life."

(Sue, Participant, June 2012)

Bill. When Bill came to the initial start-up weekend, he was uncomfortable. He told the project manager that he loved his own company. He enjoyed reading and listening to the radio, but his problem gambling counsellor suggested that he join this group because he needed to be more social. He participated in the various activities on the weekend, but it was very obvious that he was way out of his comfort zone. When the project manager called him after the weekend, he said that he was not sure if this program was for him. He would persist for a little while and, if he stayed, it would only be because he thought that he could be of help to others.

He attended 90% of the events. When he spoke at the celebration dinner, his transformation was marked: he was confident, very funny, loved life, and was a great friend to many in the MC1 group. He joined a creative writing group with a couple of other participants and offered for people to go on organised walks with him.

"As an individual and a private person I was sceptical that MoreConnect 1 could change me for the better. After my commitment that I would stick with the program as long as it would take, the benefits to my persona, attitude & socialising have surprised me enormously.

My confidence, self-esteem, contribution and less stress life has after 50 years of gambling obsession made me grateful for the involvement, help and support of MoreConnect 1." (Bill, Participant, June 2012)

Bill's counsellor saw the changes in Bill's behaviour and wrote the following letter: "It has been great to hear Bill describe his experience of the group, which he acknowledges has improved his confidence and sense of well-being and openness to connect to social opportunities, which he would have avoided in the past. He is aware that his life is increasingly expanding, after the shrunken focus when gambling dominated his life.

He continues to 'pass it on' by organising a 'walk and coffee' group, which provides ongoing opportunities for social connection and regular exercise. Such group opportunities are invaluable for inviting and strengthening people, who have been isolated by gambling problems to reconnect socially in life-enhancing ways."

(Psychologist and Problem Gambling Counsellor, Gambler's Help Service, June 2012)

The MC1 program, like the RMM Program, proved to make a difference in the lives of people affected by problem gambling. Besides offering recreational alternatives to the participants, all of whom had experienced significant harm from gambling, it also provided them with opportunities to (re)engage with other people and places in their communities.

The benefits of running this project in a local government area, with the support of local government for participating people, were:

- The provision of a non-judgmental community that encouraged participation and active engagement among people who were socially isolated due to their problem gambling.
- The facilitation of well researched and organised recreational and educational activities which increased participants' confidence and motivation to maintain the change initiated in professional counselling sessions.
- Opportunities for participants to explore, and then to continue, to engage in activities beyond the program's completion.
- 4. The utilisation of low- or no-cost facilities and activities in a local government setting helped people to stay engaged beyond the program's completion. This not only benefited the participants but also contributed to the development of better partnerships among local organisations and businesses within the community.

Study 3: MC2. No interviews were conducted for this study. The small number of participants, budget constraints, and the fact that this program was run by a different program manager made this procedurally difficult. The following statements are the author's observations about this program which she documented in a journal.

When the participants, volunteers and the program manager assembled for the first time at the join up weekend, the group of participants could best be described as motivated individuals. They were scared and unsure about this project and their commitment to participate. It was evident that the first task needed to be to define a common goal that every participant was able to accept and willing to work towards. It was thought that without a common goal there would be a tendency for everyone to be working towards their own agenda which may have led to conflict. The common goal that was generated was the commitment to each other as a group to ensure that the right environment was created for people to achieve their individual goals. This translated into an awareness of the need to attend events, participate fully and be mindful of assisting each other. The understanding was that this would in turn benefit them as well with other people looking out for their wellbeing.

It was decided that the best way to create a good team environment was by encouraging everyone to actively get involved in group activities that were engaging and catered for a diverse range of skills. The aim was to instil a belief in the participants, that they could have confidence in their abilities and trust the group, the program manager and the project as a whole. Activities and educational sessions were chosen which encouraged involvement regardless of skill level but which also gave participants an opportunity to support each other.

One thing that went hand in hand with goals was recognition. From the start, and at most events, the program manager emphasised the importance of regular participation while continuously acknowledging the valuable contribution that participants were making to their own recovery by making such a long term commitment. There was consistent talk and recognition throughout the project about the importance of regular attendance of events to enable the program effectiveness to be properly evaluated.

Another aspect, which created a strong team environment, was to make sure that everyone was able to contribute to something that would outlive the duration of the program. The program manager of MC2 initiated the creation of the 'Inside the Circle – Looking Out booklet' which was a demonstration of the change and the progress that people experienced through this program and even though there is no qualitative data to back up the progress that they made in their recovery it is a reflection of their hope that the booklet would lead to an increase in the uptake of further programs. (Appendix H) **Study 4: DTCNW.** Due to the short program duration and low participation rate, qualitative data was difficult to collect. The program manager, however, observed what were judged to be significant changes in confidence and engagement of participants in other activities.

Many participants from all six groups have (re)connected to groups and activities outside of the program. Five participants returned to sporting clubs that they had left because of gambling. Other participants picked up new activities inspired by the activities and learnings provided by the program group experience. Three participants returned to study and one joined the University of the Third Age (U3A). Friendships formed, and these resulted in regular get-togethers outside the structured activities.

The implementation of the project was congruent with the plan. The major outputs were also achieved, which included the delivery of a series of social events, recreation, and education. The major clinical objectives were also achieved. Specifically, the project accomplished a decrease in feelings of isolation and the maintenance of the defined gambling behaviour. An appropriate target group of participants was selected. These participants were extremely isolated compared to the standardised scores from a normal population

Chrysalis Insight Inc., with the support from the project partners, completed six Dare to Connect NW program sub-versions. The program offered recreational and educational alternatives to gambling for at-risk gamblers. The motto 'balance what you do for fun' was carefully selected to destigmatise the issue and reach people who might not be classified as problem gamblers.

Recruitment of participants was harder than anticipated, despite consistent program exposure via local and mainstream media throughout the year. The fact that the announcement about secured funding was delayed until July 2014 made it difficult to recruit enough people for the program. All specified target groups were represented by people participating in the four programs completed by July 2015. Compared with previous programs, there was an increase in male participation in the between 31-40 and 41-50 years ranges. Even though the marketing and promotional material distribution was limited to the north west of Melbourne, many enquiries came from outside the catchment area.

Participants from outside the target area were accepted, conditional on their commitment to attend regularly and participate in the DTCNW program. During the year, more than 60 enquiries were received from people who were interested in participating in the DTCNW program. However, these people were unable to sign up due to the distance to program events and a lack of public transport on the weekends.

Issues were also encountered with participants who were working casually and who picked up work on the weekends after the start of the program and who, therefore, were unable to attend because of those work commitments. This had an impact on the drop-out rate during the 10-12 week program. Especially in Group 2, 10 people attended the join-up day, with four dropping out because of work commitments. Another participant in Group 2 suffered from severe anxiety and found making her way from an outer western suburb to the activities too difficult. She wrote: "This is such a great program. I hope one day for the western Suburbs citizen to open another DTC. I will email Head office and request it because western Suburbs are in great need of more of those programs" (Participant ID 55).

This chapter summarised the quantitative and qualitative findings based on the analysis of participants' quantitative data supported by various qualitative components.

The volunteer experience and the value that it brought to the volunteers to maintain change in their own recovery was explored in more detail in the following Chapter VII Volunteer Study.

CHAPTER VII

Volunteer Study

Chrysalis Insight Inc.'s volunteer base continuously grew over the life of the programs. As noted previously, between two and three participants who began and completed the program volunteered their skills and time for the next group. The volunteer coordinator's role improved the work of all the volunteers and offered the program manager opportunity to focus more on events planning, recruitment, and support of participants. The volunteer coordinator's reflection on the program was:

"My name is ... I am a qualified social worker and have worked with women and children who have experienced violence, survivors of sexual assault, people who have had drug and alcohol addictions, people with disabilities. I have an extensive background in group work and counselling as well as the frontline crisis work.

When I first became involved in working with Chrysalis Insight and the program manager who was working hard to balance the needs of the participants of the program and the needs of the volunteers. As I got more and more involved the program manager and I began collaborating as I took on the role of supporting the coordinating the volunteers. The program manager and I work closely in the continual development of both the role of the volunteers and the support and care of the volunteers as most of them have been prior participants of our model.

In developing the role of the volunteers we have recognised and worked with both their strengths and their vulnerabilities. We have worked with this in the development of the training as well as in how volunteers work to support the people they support in the program.

I am humbled by the generosity of the volunteers in their eagerness to help others re balance their lives and reach their goals. I am stunned by the skills they are able to develop in using their own experiences to respectfully and intuitively support each other. I am overwhelmed by the joy of being able to be part of such an amazing model that transforms people before my eyes. I am excited about the work we are doing in development of this model to its full potential.

The program manager, the volunteer trainer and I work together in creating the training modules for the volunteers which can be challenging as we are always juggling the mix of varied experience of the volunteers in the room at the one time, but a challenge we are effectively handling according to the feedback from the volunteers.

The feedback from the volunteers continually tells us how important and crucial the role of a volunteer co-ordinator has become to the program. The feedback confirm that the volunteers feel more supported and how much they rely on having someone they know they can go to if they are unsure or if they are worried about an aspect of the program or if they have any serious concerns for the welfare of a participant." (Volunteer Coordinator, DTCNW, 2016)

The observations of the author (and manager/supervisor of all programs) suggested that most volunteers started volunteering because they wanted to prolong their involvement in the program and wanted to use this time to strengthen their own maintenance phase in recovery. Those volunteers who continued their involvement beyond their own program, over time, shifted their focus from a place where they needed it for their own recovery journey to an attitude of wanting to support others. It was noted above that, over the duration of the four programs, participants who continued as volunteers seemed to recover and sustain the changes made in the program better than those who had not continued as volunteers. This led to the fifth study, which attempted to clarify the role that volunteering played in the recovery of those participants who had continued to volunteer in programs following their participation in a group program. This chapter describes the design, implementation, and analysis of 14 indepth interviews with people who started as participants in one of the programs discussed in Chapter 5. It explores the extent to which they believed that subsequent volunteering played a role in their own recovery from problem gambling. All 14 participants in the study were previously engaged in either RMM, MC1, MC2, or DTCNW. To minimise contamination of the data, as the author had conducted many of the programs, an independent interviewer conducted the interviews under the direction of the author, using an interview schedule designed by the author.

The interviews were transcribed verbatim by the independent researcher, who worked with the author to identify potential themes. The transcriptions were uploaded to NVivo software to assist with the analysis. Transcripts were read and re-read to allow the author and the independent interviewer to classify, sort, and arrange the given information, examine relationships in the data, identify common trends, and cross-examine information given by the volunteers in a variety of ways.

Volunteer Study Approach and Methodology

While the findings might be expected to have implications for volunteers from various peer support group program types (including substance use peer support treatment programs), the focus of this study was on volunteers involved with the four versions of the program (RMM, MC1, MC2, or DTCNW) evaluated in this thesis.

Research Questions

A review of the literature regarding peer support programs highlighted a gap in relation to our understanding of what motivates problem gamblers to volunteer for a peer support Gambler's Help service and how volunteering specifically benefits or hinders their own recovery from problem gambling. In response to these identified gaps in the research, the following two research questions were investigated in this study:

• How does volunteering for a relapse-focused program impact on an individual's own recovery from problem gambling?

• What were the factors that motivated individuals to volunteer to support any of the four program versions (RMM, MC1, MC2, or DTCNW)?

Research Design

This exploratory study utilised 14 in-depth semi-structured interviews with current volunteers of the trialled relapse-focused programs from studies 1-4. The program name was changed during each study due to funding bodies' ownership rights. In 2009, RMM was funded by the State of Victoria under an *Innovations Scheme Grant*. In 2011 and 2013, MC1 and MC2 were funded by Moreland City Council, a local government in Victoria. In 2014, DTCNW was funded by the Victorian Responsible Gambling Foundation (VRGF) under a *Prevention Grant*. All four program versions were supported by volunteers interviewed in this study. To simplify the reference to any of the programs in this chapter the generic program title of relapse-focused program has been adopted.

Recruitment

The research participants were initially engaged for the study at a volunteer training session in May 2015, in which all the volunteers were present. They were provided with an overview of the research study detailing ethics and the level of commitment expected from them, and their ability to opt out of the research at any point. After this overview, volunteers were given the opportunity to flag their interest in participating by completing the Participation Information Form (Appendix I) and the Consent Form (Appendix J) provided by the researcher, and to supply their preferred contact details so that the independent interviewer could arrange and conduct a semi-structured interview. This was a purposive sampling method, as it involved intentionally selecting information-rich participants based on the needs of the study. This method recruited 12 participants, with the remaining six volunteers present at the information session declining to be involved. Two further participants were recruited outside of the original recruiting session via engagement by the

author/coordinator. These key volunteers were recognised as having an interest in involvement but had not been able to attend the information session. Those engaged for the study were recognised to have different levels of volunteer experience in this relapse-focused program, ranging from fewer than six months to six years. The range of volunteer experience was not considered in the recruitment process. The only desired criterion was for participants either to be currently involved as a volunteer in the relapse-focused program or to have been involved in one of the previous programs.

Data Collection

Data collection occurred at participants' homes or a community house where the volunteer training occurred. They were convenient and familiar locations which allowed the interviewer to have an extended period of time and were locations which evoked firsthand involvement in the context of the study (Krefting, 1991). Interviews lasted between 35 and 55 minutes. They were audio recorded by default, but interviewees could opt for detailed notes to be taken instead. Interviews were undertaken in a qualitative inquiry format, as they were recognised as dialogues with embedded purpose (Marshall & Rossman, 2014). An interview questionnaire protocol was utilised (Appendix K) to guide the semi-structured interview process. In line with techniques of collecting exploratory qualitative data collection techniques, the questionnaire was not prescriptive. Rather, the questionnaire functioned as a tool to navigate the various factors that motivated the volunteers and explore whether volunteering influenced an individual's recovery from problem gambling. Along with this questionnaire, the interviewer brought a reflective journal (see Appendix L for an example of this) to the interviews for their recordings of reflections on the process and findings in real-time.

Before each interview began, the interviewer allowed time for the participant to clarify the interview process, if needed, as some were engaged via the program coordinator

rather than via a briefing session. This also functioned as a rapport building process as participants could relax, ask further questions, and familiarise themselves with their rights as a participant. Once participants were clear about the process and explicitly assured the interview would be kept securely, with a copy emailed to participants, informed consent was re-established by reminding them of their completed consent form. Throughout the interview, the interviewer maintained an empathic persona and open body language to ensure that participants were not disenfranchised (Langdridge, 2007). Theoretical saturation occurred when no new insights were taken and no new themes became evident. At this point, data categories were established, validated, and data analysis could occur (Bowen, 2008).

Data Analysis

The interviews were transcribed verbatim by the interviewer and reflective comments were made on the right side of the document so initial analytical reflections regarding potential themes could be input into a thematic analysis. The transcriptions were uploaded to the NVivo software to assist with the analysis. The interviewer and author read and re-read the transcripts to familiarise themselves with the data to be analysed. The reflective journal, the reflective comments therein, and the raw data were all utilised to formulate appropriate recurring themes, which became further refined with each re-reading of the data. Emerging patterns and interpretations from the data were listed separately as potential themes, then further scrutinised and refined once subsequent data cases were analysed (Creswell, 2013). This process was heavily iterative, and once a handful of preliminary themes emerged, the author reflected on how the problem gambling peer support literature and the theoretical approach linked to these emerging themes. Many themes were chosen through a dialectical process of inductive coding and a re-examination of the academic literature reviewed for this study. Data were then sought to scrutinise these themes further and to consolidate their interpretive meaning and interrelationship. The author then further distinguished the themes

either to describe exclusively the benefit that participants believed that they received from volunteering or their motivation to volunteer. The author realised that most of the motivation themes could also be identified as benefitting an individual's recovery, so they were analysed though the lens of motivation. After the 14 interviews had been analysed, data in the form of illustrative quotes were extracted and linked to the themes in order to exemplify the meaning of these themes.

Findings from the 'Volunteer Study' and the Development of the Volunteer Motivation Conceptual Model

The first aim of this study was to investigate whether the volunteer component of the trialled program as documented in Studies 1-4 contributed positively or negatively to the individual's own recovery from problem gambling. A further aim of this study was to explore the factors that motivated these individuals to volunteer for the program. The following section provides an overview of the characteristics of the participating volunteers, followed by the key themes that emerged from the semi-structured interviews. The participants in this study were spread between all versions program, Studies 1-4. As the volunteer study progressed, the author became increasingly mindful of the diversity of volunteer experiences among the participants and their differing overall involvement as a participant in Studies 1-4. The participants' duration of involvement with the program in the earlier stages and the volunteer stage was recognised as having an impact on their motivation and recovery.

Many themes emerged through a dialectical process between the inductive coding process and a re-examination of the academic literature reviewed for this study. This balance of inductive coding and theoretically underpinning the interpretation from the literature had the purpose of enabling a meaningful and rigorous analysis. However, it is important to note that the themes that explained participants' motivation to volunteer often intertwined with the themes that explained how volunteering impacted on their own recovery from problem gambling. Therefore, themes around beneficial impact on their recovery have been labelled benefits. Table 14 outlines each participant in the study along with their duration of involvement as a participant and a volunteer in the programs, as well as any help that they had previously sought prior to engaging with the program. These factors are listed in the table, as they have the most influence in determining approximately where each participant re-enters their recovery journey as a volunteer, which phase of motivation they are most likely to begin, and which benefits they are most likely to derive from their volunteering.

Table 14

Key Volunteers

Volunteer	Previous Help	Period of Program	Period of
Code		Participation	Volunteering
F-01	PG counselling; Mental health counselling	6 Months	2013-2017
M-01	PG counselling	6 Months	2013-2017
F-02	PG counselling; Self-Exclusion	6 Months	2013-2017
F-03	PG counselling; Self exclusion; Financial counselling	6 Months	2013-2015
F-04	PG counselling	6 Months	2013-2017
F-05	PG counselling	12 Months	2011-2017
F-06	PG counselling	10 Weeks	2015-2017
F-07	PG counselling	12 Months	2011-2015
M-02	PG counselling	6 Months	2013-2017
M-03	PG counselling; Financial counselling	10 Weeks	2015-2017
F-08	PG counselling; Financial counselling	6 Months	2013-2017
M-04	PG counselling	12 Months	2011-2017
F-09	PG counselling	6 Months	2012-2017
F-10	PG counselling	12 Months	2011-2017

Key Themes

Themes that emerged from the study of peer support problem gambling volunteer

motivations and impacts on individual recovery are shown in Table 15.

Table 15

Overarching Themes and Key Themes

Overarching theme	Key themes
Motivation to volunteer	Focus on future (20) Leadership (16) Empathy (15) Reinforcement & learning (15) Social inclusion & friendship (14) Recovery (7) Belief in program (4)
Benefit to recovery	Skill development (25) Social identity (11) Self-awareness (19) Focus on others (10) Social capital (10) Focus on self (9) Shifting focus (7) Self-efficacy (6) Resilience (4) Purpose (2)

Note. Brackets denote number of mentions.

Two overarching themes were identified a priori, based on the two research questions, in order to ensure that they were addressed in the analysis. The two analyses (by the author and the interviewer) showed close agreement on most key themes, with none being contested by the author or the interviewer. Analytical differences emerged when key themes were identified by the interviewer or author separately, with differences resolved via discussion and a decision either to include or discard the theme in question in the final analysis. A significant analytical difference emerged at an early stage with the interviewer coding a section of data as 'recovery' and the author coding that data as 'focus on self'. If a participant is motivated to volunteer through their own recovery, then the associated benefit will be having time to 'focus on self' in order to aid to their own recovery. Therefore, data was coded as 'focus on self' if no motivation themes could be drawn from the data. As the recurrence of emerging themes can indicate their relative importance (Collingridge, 2013), the number of times each key theme was mentioned by the volunteers was counted and is documented in Table 15. Figure 9 below was produced in order to highlight the interconnectedness of the various key themes, and how certain *benefit* themes are strongly associated with certain *motivation* themes.



Figure 9. Volunteer Motivation Conceptual Model

Motivation to Volunteer

The following sections will go through the identified motivations to volunteer and explain their significance.

Motivation to volunteer: Recovery. For many volunteers, their original motivation to volunteer for any of the relapse-focused programs was exclusively to aid their own recovery from problem gambling. Within the volunteer group, recovery from problem gambling was perceived in a variety of ways. Some perceived recovery as the cessation of their gambling activities, while others may have ceased gambling but still perceived themselves as recovering due to their vulnerability to relapse. Using the lens of the transtheoretical model of change (Prochaska & DiClemente, 1983), the action stage or recovery stage should typically end when a participant completes the program. The maintenance stage then proceeds, in which new behaviours are practiced and reinforced. However, a variety of factors often meant that some new volunteers did not perceive themselves as recovered. Rather, they felt motivated to volunteer in order to remain in the action stage and to continue assisting their own recovery.

In this study, recovery becomes ambiguous as it is also viewed as the volunteer's successful progression to the termination stage in the transtheoretical model of change. Complete recovery is reached when their new behaviours have become integrated as a part of their lifestyle and maintained for a significant period of time. However, recovery in this context only refers to the individual's completion of the action stage. For many participants, the program might have felt as if it ended abruptly and they were left at different points of progression in their recovery process: Initially it was to stay involved in the program as simple as that, I do not want to really turn away from this, we want to still be a part of it, so originally it was definitely 100% for me, but after that learning a bit more about the whole process (M-02).

Two volunteers believed that, if they were not to volunteer, they would face a serious risk of relapse and to fall back into the cycle of problem gambling:

I do not think my recovery would have continued, I think I would have gone straight back, I think it's really important to continue, to volunteer it just seems automatic, if not I think I would have relapsed without it (F-10).

The four volunteers that were evidently motivated to volunteer for the program to aid their own continuing recovery articulated that the volunteer component was as important, if not more important, than the initial participation stage. The volunteer component is not limited to a finite timeline in the same way that the original program was time-bound. Some emphasised the advantageous nature of this flexible timeline, as their recovery progress had taken longer than initially expected, and continuing on as a volunteer directly aided their own recovery:

Being a volunteer has been as important as when initially starting the program, because if I had just gone to that 10-week course and not kept involved and not been recovered, I think I still would consider myself in a hopeless situation, whereas I do not now. I do know it's taking longer than what I expected but I'm still on the right path, so the volunteering from my point of view has been really important for my recovery (F-06). Each volunteer's recovery from a state of problem gambling was recognised to be inherently different, through the interplay of various social, psychological, and environmental factors that determined the duration and the possibility of relapse. A factor that could also be influencing recovery as a motivation to volunteer was the duration of the original relapsefocused model. Of these same four volunteers, one had been involved with the initial 12month program, RMM, two with the six-month program, MC1, and one with the 10-12 week program, DTCNW. Even though volunteer M-02 did not explicitly state in the interview that their own recovery was a motivating factor, their comments implied that they were still in a self-recovery stage. This might have strong implications when considering the ideal length of a relapse-focused program, as the 10-12 week program may have been insufficient for achieving a long term recovery outcome.

Motivation to volunteer: Belief in the program. In a number of volunteers, there was a noticeable distinction between those motivated exclusively through their own recovery and those who witnessed a portion of their own self-recovery and now were ready and wanted to give back, as they trusted in the effectiveness of the program. Many of these volunteers were recognised to still be subconsciously aiding their own recovery, but they were motivated to volunteer through their belief in the effectiveness of the relapse-focused program:

I wanted to put back in that's what I wanted to do. Even though there were times where I felt as though I did not want to go, or if I felt like I couldn't do it I told myself do not underestimate yourself, and the value of you just being present there, and this is what I say to some of the people that I talk to, the participants who talk to me and do not want to come, do not ever underestimate the value of you just being there and being part of it. So I wanted to put back in and I hope I am, and that's what motivated me to volunteer. It's always been that way I do not want to take without putting back in, it's a very generous program (F-08).

Volunteer F-08 highlighted how volunteer motivation can be altruistic in nature, but to an extent she is aware that her ongoing exposure to the program is helping to embed long term changes and her recovery efforts. The notion of *putting back in for what I have received* is linked to an inherent belief in the efficacy of the program. Strong rapport with the program founder/manager and a recognition of the not-for-profit, resource-limited nature of the program also had an influence on volunteer motivation:

There was no training back then it was just, I respected totally what ... had done and the benefits that I got out of it so it just seemed like a natural follow-on to be a volunteer support person (F-05).

... is just such a powerhouse (F-10).

Volunteer F-10 built strong rapport with the author and program coordinator throughout the original relapse-focused program, RMM, and this was flagged as the exclusive reason that she originally felt compelled to volunteer for the program. Although her motivations changed over her volunteer period, this pointed to the importance of having empathic practitioners that have a vested interest in the people for which the program catered. The social and leisure opportunities which the program provided allowed for rapport building between the coordinator and the participants, which may not exist in a program that does not focus on social connections.

Motivation to volunteer: Reinforcement and learning. The transtheoretical model of change differs from traditional action-oriented change models as it highlights that change can occur outside of the action stage. Initially taking action, whether that be seeking out therapeutic counselling services, Gamblers Help, self-exclusion, participation in the various relapse-focused programs, and/or other peer support model programs, is recognised as the commencement of the action stage (Prochaska & DiClemente, 1986). The action stage sees individuals strengthening their commitment to change with the help of external supports. Beyond the action stage is the maintenance stage, in which new behaviours become reinforced and start to become a more integrated part of individuals' lifestyle and identity. However, vulnerabilities may still exist for many, and the risk of relapse is still present. For many volunteers, volunteering efforts were initially motivated by a desire to reinforce what they had learnt from the program and to be reminded of their progress:

It was for maintenance. I felt that I needed to be reminded all the time about gambling. I need to be reminded not to go into it again, and this helped me in the way I said before that I felt obliged to other people to stay on the straight and narrow, it was harder back then than it is now, it something I have to stay aware of all the time. I have to make sure I do not just forget about what gambling did to me and how easy it is for me to sit at a machine and lose a whole lot of money (F-09).

Some volunteers stressed the importance of volunteering because they found themselves between the action and 'maintenance' stages of change after completion of the program. This is distinguished from being motivated purely through recovery, as these volunteers had made significant changes to their gambling but initially faced the threat of relapse:

But also realised that I still needed to keep up some kind of participation so that, umm cause I still wanted to keep up the positive input into my life, and help with the more

infrequent now gambling situations. I decided to volunteer because I wanted to get some more reinforcement (F-01).

The program versions (Studies 1-4) themselves encapsulated various learning opportunities. Many volunteers mentioned that, during their participation in the program, their cognition was clouded by their problem gambling situation and they may not have absorbed much of the learning provided. An opportunity to revisit the learning sessions, as well as gaining new insights, was signalled by approximately half of the volunteers as motivating them to volunteer:

As a volunteer it opens your eyes up, and you get a lot of insight into how people work, how the brain works, so I am learning as I go yeah. I do not look at myself and think I'm just going to keep on volunteering and just pat people on the back or anything like that, I'm there to learn as well and to become a better person at the end of the day (M-03).

... Even though the sessions are repeated you still pick up on something, you still learn something. You can use a lot of the things that the new participants are hearing for the first time, but it kick starts your brain back to thinking along those lines so it's good, and that's why I volunteer it is for the ongoing (F-10).

Many of the volunteers associated learning with personal growth and progression away from a state of problem gambling. Opportunities to develop new strengths are an essential element of the maintenance stage, and revisiting the learning in the program provided take-away strategies and embedded resilience. Their motivation was not exclusively to acquire new knowledge but for that knowledge to assist them through the maintenance stage. The reinforcement that they received from observing changes in the participants as a volunteer was recognised to be an important motivator. One volunteer suggested that articulating the program evaluation to the volunteers could also reinforce the importance and effectiveness of the program, in turn motivating volunteers:

I would be quite interested in knowing how people have actually been helped, it's having the evaluations made, like to be told about the evaluations and to know how successful the program actually is, then that is more of a motivation to keep on going, and so you are not wasting your time (F-03).

Motivation to volunteer: Social inclusion. The peer support model of the program allowed for the proliferation of intimate social connections, whether that was among or between the participant group, the volunteer group, the program manager, and/or the workshop facilitators. Socialisation within the program was not explicitly articulated by any of the volunteers as their initial motivation to volunteer, but was an undercurrent when addressing why they continued to volunteer. The opportunities for general socialisation seemed to be embraced by most of the volunteers and there was recognition of the benefits it provided:

General socialising, because we have social Sunday every month, this Sunday we going to the Canterbury Gardens, and that's open to everyone they can all come along, it's just a social, and it's been increasing. I mean we're getting 15 to 20 people coming along, and they enjoy it, they put it on Facebook and say oh wasn't that such a great day that was. I mean those places that exist I did not even know about (M-04). Another evident social dynamic was the team mentality that continued to be fostered throughout and across the four relapse-focused program versions. A team mentality can drive volunteer motivation because team members felt that they belonged, were valued, and were able to rely on, or be relied upon by, their fellow team members. Strong rapport building opportunities cemented this mentality further:

F-01: Being there together with all the volunteers, after having said that I mean that was good because it's good that we get together as a group again and we can see the total unit I guess, it's kinda like the volunteer squad. Interviewer: The wolf pack. F-01: Yeah exactly (F-01).

The socially inclusive nature of volunteering was largely attractive to those still recovering from their problem gambling, as these individuals were extremely socially isolated outside of their previous gambling activities. The importance of staying connected to the group was expressed by many of the volunteers as they felt that they would slump back into vulnerability without that network:

I think I would just start feeling sorry for myself and become a bum again at home and not go out and socialise, because I do not really have friends that I often go out and socialise with, it's all about being in the group and staying in there that keeps me going (F-03).

The ongoing social connections that proliferate from volunteering were of huge importance to the volunteers, as often individual social connections had been lost in dramatic ways directly from the negative outcomes of problem gambling. Re-learning how to socialise outside of their previous gambling environment and to foster strong friendships within the group were motivating factors behind volunteering for the program:

Great, need it, totally need it. I think the lesson planning and all the rest of it is so important, but the social aspect is even more important in some ways, because I think a lot of gamblers are people that are quite happy with their own company and do not know how to communicate. You go into a pokies venue and you do not see much interaction unless they are smokers. Smokers will go out and talk to the people out yonder, but then they go straight back to the machines and then it's all focus on that machine. So yeah I think the social aspect has been really important as well, to relearn how to socialise (F-10).

Re-socialisation of these recovering problem gamblers outside of a gambling context also had significant benefits for them. It created an environment in which empathic and meaningful relationships could be cultivated without a fear of stigma or a feeling of inadequacy. The creation of meaningful friendships was recognised as functioning as a form of social accountability, where volunteers felt motivated by their relationships and being accountable to these significant others. An unexpected outcome from the re-socialisation of these volunteers was the formation of three ongoing intimate relationships between the current cohorts of volunteers. Their relationships have functioned to motivate their commitment to change and has made them accountable to their significant others, who have an empathic understanding of their recovery journey:

Like I do not know whether you know (M-02), he has been amazing. He was gambling a hell of a lot, and he had nothing, and he met his partner through this program. I mean he met his partner here and so did I, and there has been about 3 relationships that have gone on really well, and that's another part of the program that's been good, it's just something that happens (M-04).

Evidently, having a partner who had the same commitment to change strongly assisted a commitment to abstinence and increased the potential for emotional peer support.

Motivation to volunteer: Empathy. Empathy was placed further along on the linear pathway of motivation in the conceptual model (Figure 9) because the recovery and reinforcement and learning themes were recognised to be more generally self-interested motivating factors for volunteering for the various relapse-focused programs. This selfinterested motivation was considered to be an essential first step in focusing back on their own wellbeing, before they were able to introduce other's recovery journey into their psyche. The social inclusion and friendship theme was therefore placed after the first two. Social connection is still self-interested, but volunteers became accountable to the maintenance and expectations of the friendships and relationships formed. After these three elements had been satisfied, empathy became a motivating factor as the volunteers generally had greater capacity to focus on and address the participants' recovery journeys. The volunteers were still performing a support function for the participants from the commencement of volunteering, but motivation through empathy usually paled in comparison to their self-interested motivation when they first became a volunteer. The general trend was for volunteers to have a focus on their own recovery and learning while functioning in a supportive role, then transitioning to a focus on their support function while still being reminded of the importance of their recovery and their personal development. This development and their newly learned and nuanced coping skills could be fed to the participants if it were felt to be appropriate:

But after learning a bit more about the whole process, having people ask about how you got through and all the rest of it, and people also saying that's a good idea I'll try that and then coming back to you the week after and saying I've tried that and that was good it's working. Just seeing people take those little steps and then eventually people are pokie free it's just such a good feeling, it's such a buzz to know that you are helping somebody in that way (M-02).

A number of volunteers reported that they felt generally recovered by the closing of their participation in the program, and their motivation for volunteering started with wanting their progress to be reinforced and to remain part of the social group and to foster friendships. Once those social needs had begun to be satisfied, volunteers directed their focus to the participants' recovery. Volunteer M-01 was mainly driven by empathy, as traits of problem gambling had significantly diminished by his commencement of volunteering:

I think at one stage I was the only sort of horse racing gambler, and whether you say I sympathised or empathised because I also did lose a lot of money on the poker machines, it seemed like it was a sort of different problem. It was kind of a common denominator for people that have had sort of issues with gambling, if they did not have issues with the pokies they would at some stage. There were things happening in these people's lives which I do not think I had, I wasn't entirely uncomfortable with my personal life when I was gambling. While a lot of people with the poker machines seemed like it was an escape. It might have been an escape for me at certain stages, that how it started. So I'm the type of person that gets inquisitive, I'm interested in other people, you know how can they come out of this? (M-01).

Some volunteers actually understood the function that empathy plays in the relationship between the participants and volunteers. An understanding of the importance of this function was in turn a driver to continue for some of the volunteers. Understanding the value of their role for the participants was an important motivator for the volunteers:

The sense that people have been through a similar thing that they are going through, it's hard to be duplicated by family and friends who do not know. So from that point of view I think you are in the box seat and you really build up that rapport a lot quicker and build up that trust, you know they're not necessarily as scared to speak out (M-02).

The function of empathy was a key in the facilitation of the program as well. The volunteers highly valued the empathic relationships that they formed, including with the program manager. Once the volunteers became aware of her personal journey, they in turn felt a similar commitment and were motivated by this. Volunteer F-05 is addressing a program in which another individual was assigned program manager:

It was actually run by a different facilitator, people gave her a bit of a hard time ... she did things differently and sometimes she would get really pissed off with this bunch of people that you couldn't hurry along, they were notorious timekeepers, but you know she did her job which was well within her scope. She might not be a gambler and so I think that a few volunteers felt that it wasn't the same because she had no real understanding of what we have gone through and what [the program manager] had gone through (F-05).

Volunteer (F-10) is referring to the first program RMM where the volunteers were mainly non-problem gamblers because it was the first time the program was run.

As a participant back when we did it, all the volunteers were pretty much nongamblers, and particularly on our weekend away they were counsellors. So the volunteers were just people but to me were normal, I did not feel that I could approach and talk about my issues without it becoming a session (F-10).

The professionals that F-10 is referring to have the capacity to provide formal support. However, if a participant needed empathetic informal support, professionals may not have had the capacity to deliver. The majority of the volunteers recognised the value in the informal support that they provided for participants, and this in turn is a motivation for their continuing involvement as a volunteer.

Motivation to volunteer: Leadership. Leadership is placed towards the end of the conceptual model (Figure 9) because none of the volunteers articulated this as an initial motivator for volunteering. Some of the volunteers had experience in leadership roles within the program, whether that was short-term facilitation of an activity or management of administrative duties. Initial exposure in a leadership role can create an ongoing interest for an individual, who may continue to feel motivated to volunteer as they are gaining the experience they desire to pursue that role. Even when providing informal support to participants, some volunteers demonstrated a leadership mentality by wanting to be as effective as possible, even if that meant participating in further external training:

I'm thinking of actually doing a counselling course since I am sort of counselling, because I'm always struggling to find the right things to say to kind of sum things up, what's the best thing to say to that (F-08). Some of the volunteers were recognised to be motivated by their aspirations for a leadership role. These individuals had a perception of how they could help the facilitation or development of the program through leadership but were still primarily motivated to volunteer by earlier themes in the conceptual model (Figure 5). By staying in the program, they were developing themselves to be capable of their desired leadership role:

I was thinking, because we were struggling to find participants, I know that some people go out and do guest speaking and stuff like that at clubs. I do not know if I would be ready to talk in front of a huge group of people, but I would be quite happy if everything worked out. I would be quite happy to have a pop-up stall somewhere, and if some people walked past and they wanted to know more. I am flexible to a point but I gotta understand that I'm still at the point where I am learning a lot, and the confidence ain't sky high yet but it is getting back up there (M-03).

A number of the other volunteers had been given previous leadership roles within the program and now recognised their capacity to fit such a role. Some even recognised that there may eventually be a need to fill managerial roles and are orientating their volunteering efforts to develop that capacity:

I still want to volunteer, and [the program manager] has encouraged myself and (M-02) to run a couple of the sessions as well, and trying to give us more of a leadership role and maybe keeping in mind that [the program manager] might want to take a backwards seat or may want to take a different role within the organisation or whatever (F-04).
Other volunteers had already assumed leadership roles for the program where their own interest and skills could be applied. Their involvement became centred on carrying out that role more so than the traditional supports that the volunteers provided. This may be in a formal context such as program management:

With me it's more probably the management of it now is where I have got to rather than even though I volunteer, it's more like I can step in for [the program manager] if I needed to, and what's the framework of our program? And who do we need to go to? And where might we get the money? And how do we wisely spend it? (F-07).

It also proliferated in an informal context where one volunteer provided external social meet-up support. Volunteer M-01 took it upon himself to provide informal meet-ups for the participants as he could apply his interpersonal skills in a relaxed context. This, in turn, also satisfied his desire to further understand the issue of problem gambling and the pathways in and out of such a state:

I often got and have coffee a lot with individuals anywhere, they say can you catch up in my area? I went out to Watergardens last week, sometimes spend 3 or 4 hours with them (M-01).

Both of these volunteers were driven to stay involved as a volunteer because that role satisfied their individual interests and was an opportunity to continue their own learning and capacity. Keeping tasks challenging and interesting was a vital element for keeping individual volunteers engaged and dedicated, and fostering formal and informal leadership opportunities is paramount for a successful peer support volunteer program. **Motivation to volunteer: Focus on future.** The focus on future theme relates to the volunteers' desire to achieve future goals outside of the program as their motivation to volunteer. Although not explicitly stated by the volunteers, there was an understanding that they would be less likely to reach their future goals if they were not committed to abstinence. This theme blurs the line between motivation and benefit, as they may have always had an underlying focus on these future goals but did not have the capacity or confidence to pursue them. Some volunteers articulated their aspirations for the future but felt a need for further personal development by staying involved as a volunteer:

I really want to learn French, I loved French when I was at school. I'd love to sharpen up and be able to speak French before I go overseas, and I would actually like to do public speaking. I would like to be a spokesperson for an organisation such as this in a way, I would like to continue to develop confidence first (F-08).

Other volunteers had clearly considered activities that they would take on if the program were no longer available to them. They continued to volunteer because they recognised that their efforts were highly appreciated and they remained satisfied in a volunteering role. One volunteer's future aspirations were to continue contributing in some form to the issue of problem gambling. In a sense, by staying in their role, they were satisfying this:

But, ongoing, let's say this stopped for some reason or another, I hope not, but I would be involved with Moonee Valley in some form. I would go to Moonee Valley Council or maybe Moreland Council, I'd put my hand up and say look, is there anything I can be useful for? This will get me up in the day to have a purpose, I'll still have my own interests, but there has got to be a few hours a day, where I am contributing to society (M-01).

Volunteer M-01's renewed purpose was to have some form of social contribution and, whatever form that may take in the future, it currently remained in his volunteering efforts. He was motivated to remain volunteering because it satisfied his purpose beyond gambling, which was to contribute to addressing social issues and problem gambling. Other volunteers had not progressed as far and continued to utilise volunteering to improve skills, so that they could be adapted and applied in the future:

Also because of all this I have taken on a community services diploma. I am studying community service and it's all thanks to this and I'm learning in that as well and trying to use what I've learnt so far in my volunteer role (F-02).

Even though they had a focus beyond the program itself, many volunteers were motivated to continue volunteering so that they could extract the appropriate skills and resources for their future endeavours. One volunteer discussed whether they had reached an exit point with the program after having a prolonged focus on future possibilities. Their focus on future opportunities had in turn motivated them slowly to remove themselves from volunteering. Therefore, the focus on future theme was recognised to be the exit point for the conceptual model (Figure 9). Having a clear purpose and focus beyond the program was an essential element of the recovery process and helped to leverage the withdrawal of volunteers who no longer had a direct motivation: Yeah I'm probably coming to the idea of is there a life, is there a natural life in a team of volunteers from my perspective? And that's possibly why I'm more backing away from some of the more volunteering in a formal sense over the last 12 months, because other people can get a go at it, and I maybe do not need it as much anymore, I haven't worked it out, but I'm financially secure, I'm socially more secure (F-07).

Once a volunteer established their future focus, their motivation to volunteer changed from primarily assisting the participants and peers, towards developing the appropriate skills and acquiring the resources needed to thrive in their future endeavours.

Benefit to Recovery

Benefit to recovery: Focus on self. This theme is closely related to the *recovery* motivation theme, as the benefit lies in the volunteer having the opportunity to have a continued focus on their own recovery. Many volunteers recognised the importance of staying connected to the group and the impact that it had on their abstinence:

It was to stay in the group I suppose, to stay connected. It wasn't because I was thinking that I wanted to volunteer, that I was going to change someone's life or whatever, it wasn't anything like that it was just to stay connected (F-03).

There was also a concern with regard to there being a void or lack of purpose in the volunteers' lives following their completion of the participation stage of the program (Studies 1-4). Volunteers generally desired more meaning in their lives following the completion of their program, often prompting them to volunteer:

I just wanted to be a volunteer, I did not want to go away after that 12 months and just go back to what I was doing, I could see that it was going to work, and I thought it was a great idea, like it was called remaking meaning, and it was it was like re making your life (M-04).

Along with assisting their recovery from problem gambling, volunteering embedded structure, responsibility, and purpose, which are all features that are generally lacking from problem gamblers' lives outside of their gambling:

Well it's been trying to make myself more organised too, because I'm very much a person that if I do not write something down I won't remember it's on. So it helped a little bit in terms of me organising my life and thinking more than a week ahead, because I did not use to I used to just live day to day. So it's been good for me in that sense, as far as giving time to it and that, I had plenty of time to give and I was really needing more productive things to do with my time (F-06).

Having an extended period to focus on their own recovery was essential for many volunteers before their focus and efforts could be predominantly directed towards the needs of the program participants.

Benefit to recovery: Shifting focus. Following a period that was predominately utilised to focus on their own recovery, volunteers turned their focus to consciously providing informal supports to the program participants. Even though they recognised that this was their role from the onset of volunteering, many were still consumed by their own recovery. The benefit was that volunteering provoked a transition from exclusively focusing on one's own recovery to addressing empathically the recovery of the program participants:

I think there has been in my involvement, quite a number of people who are still really in that participant stage you know, ongoing, even though they've put their hand up for volunteering, but I've seen a lot of improvement in them once that volunteering starts. They might not have been ready initially, but by turning up to functions and programs those people are getting quite focused, their self- esteem has gone in my time, for some of them, who now want to be involved in a speakers bureau, you know, whereby they, when they started, they do not want anyone to know, now they're prepared to stand on a stage, and talk to groups (M-01).

This shift in focus towards the program participants was representative of that volunteer's progression towards their own recovery. This is also represented in Figure 9, through the linear progression of the *motivation* themes, the focus specific *benefit* themes, and their relative parallel positioning. Many volunteers functioned in a space where they were still aware of their ongoing recovery but were actively assisting the participants:

So to me that was a way of again staying connected with the group, and I guess it's to help yourself as well, as well as helping others, so it's a double whammy I guess. You are still helping yourself, you still need that connection and focus and reinforcement, but at the same time you are still there helping other people (F-04).

Benefit to recovery: Focus on others. The majority of the volunteers reported that they had an intention of giving back to the program as well as assisting their own recovery from problem gambling. Volunteers recognised that, as their own recovery progressed, they gained further skills and the capacity to concentrate their efforts toward supporting the program participants. The participants could always rely on informal support within the program, but many volunteers went 'above and beyond the call of duty' to assist and benefit the participants:

I did not want to forget about them and I just wanted to, not stalk them about it but to just stay in touch, to say look someone is thinking about you. Anyway, because she had just gone away with a group of people into the country and that, to have pokie days, so she was very upset with herself and I think she was really beating herself up about busting. She told me she said, she's really happy that I rang when I did because she was feeling so down about it, and there was just something that I said that made her feel better about herself and about things, and that's what gives you satisfaction is knowing that you have maybe helped someone out (F-03).

This empathic support and focus was highly valuable, as the volunteers were in a strategic position to approach the participants with sensitivity and compassion. Many of the volunteers were aware of these benefits, as they too had received empathic support while a participant in the program. A few of the volunteers were at a stage where they no longer needed the program for their own recovery and were concentrating their efforts towards supporting the participants:

So the time is not a matter, I mean I just like to think they can talk to me as freely as they like. I might give some examples of my background, as to what happened and try to encourage the fact that they have only been in the program for one week, or even haven't started, that you gotta stick with it. "Just turn up" I say, (whispering encouragingly) "just turn up", "you do not have to say anything", "just sit there, listen, and take something away hopefully" (M-01). The participant cohort was not the only group recognised as requiring assistance and support. As the volunteers were all at different stages of their own recovery, one volunteer saw the need in addressing the welfare of the volunteer cohort:

I think it was more about seeing that I had skills that could be useful, and seeing that there was a need, it's just kind of eventuated. You know you do a little bit and then you're helping out, for me it was looking at what we offer the volunteers (F-07).

This eventual shift to focus predominantly on others within the program was exemplified in a number of ways. Specifically, some volunteers saw their skills being appropriately utilised by informally supporting the participants; some took charge of addressing the needs of other volunteers; while others were involved in program administration and helping the program manager. All of these efforts had a direct focus on others and were never initiated by the program manager.

Social Identity

The process of social identity change was revealed to be a significant driver for reducing the threat of relapse among the cohort of volunteers. While the identity change from being an addicted individual to being an individual who was overcoming their behavioural addiction may not have reduced thoughts of relapse, it did help to reinforce their recovery progress and an assumed responsibility of being a volunteer. This identity change was heavily reinforced by being involved in this social group of other recovering problem gamblers. Being a member of the volunteering cohort helped to solidify an identity associated with recovery and removed past associations with addiction. For many volunteers, volunteering promoted the start of a changing identity, as many problem gamblers even in the action phase, are isolated from social groups outside of gambling:

I think I see the turning point for me was becoming a volunteer, and then I started to become a giver, I feel most of my life I've been a taker (M-01).

Many volunteers reported that the turning point was their commencement of volunteering for the program. Changing one's identity from someone actively addicted to an identity as someone on the recovery pathway acted as positive reinforcement to their abstinence:

Yeah it's almost like a promotion in the workplace, where one moment you're just one of those, and now you're almost in a supervisory role that gives you a little bit more esteem. Whatever it is, you feel a little bit more important, where to being a participant where you are almost seeking help, and next thing you have taken that step. That's where I've noticed with volunteering that the people start to change their attitude a bit to themselves (M-01).

This change in attitude was not reported as happening in the short term by any of the volunteers, but was recognised to be an ongoing journey of personal development. The old social identity is not merely replaced but evolved, as new skills and confidence were realised. The potential outcomes from the development of this journey were only bounded by the perception of the person making the journey:

By volunteering it keeps me in touch with the program, it sort of becomes a journey. It's a journey where you find that you are developing, and then you just want to keep that journey going, and to me that is what it has become now, this is a journey after gambling, and my journey during the gambling I wouldn't have thought about anything or wanted to do anything like this, and after the gambling when this became, this is now my journey (F-03).

Volunteer F-08 never perceived that her relationship with her children could be revived. However, her identity change and recovery allowed an opportunity for reconnection. Her articulation that *she must be a different person* showed that she had taken on that new social identity and was reconstructing her social relationships with her children:

Well I have a sense of commitment which keeps me you know safe, plus my kids love me now, I did not think I would ever have a place in their life, and I do not know my whole relationship with them has changed so much now, it's just as though I must be a different person, I've been doing things with them (F-08).

Social Capital

Social capital refers to the relative advantage and resources that can be drawn from existing in social arrangements and relationships (Coleman, 1988; Putnam, 2001) or 'assets in networks' (Lin, 1999). The benefit of social capital is not necessarily derived from existing in social networks but rather from the resources that these networks make accessible, including recreational activities. The majority of the volunteers reported that they could call on another volunteer/s for informal support outside of the program activities: She knows that someone is there to listen to her, or when she becomes isolated and goes back to the pokies because she still does, she knows that if I do not hear from her in a certain length of time or no communication that I feel comfortable enough now to go and knock on her door and say are you ready to let me in so you can talk to me. Quite often we do not even discuss the gambling, we just discuss how they are feeling about particular issues which would generally send you back to the pokies (F-05).

This proactive form of informal support was extremely valuable to the volunteers, as it was difficult to provide such a resource through a formal support mechanism. A supporting individual was not instructed to provide support. Rather, they were intimately aware of a person's vulnerabilities and triggers for relapse. This was recognised as a very cost-effective method of providing intimate support and allowed for a further building of rapport between volunteers. Many other volunteers stated that they felt like they had a network of support via the social connections made throughout their involvement with the program:

One is making friends and yes there are a couple of the girls that keep in touch and we all go out for coffee and stuff, but we are all busy so it is probably not a frequent thing. But it's also having a few people that you know you can just ring if say I'm feeling lousy or I'm feeling annoyed at myself, and I can do that with one or two of them. I also feel as though I do have mentors who have recovered and are good people to ring, as well as ones who are just more friends (F-06).

This network of support within the volunteer group was characterised by empathic understanding. Volunteers saw themselves as being in the best position to provide support due to their intimate understanding of the needs and challenges of the other volunteers: I'll ring up my friend and say do you want to go for a cup of coffee? Or a meal? Or if I sense that she is stressed, so we kind of watch each other's back, because someone understands what you have been through, because a lot of people do not (F-05).

Skill Development

All but one volunteer believed that they had acquired a number of new practical and interpersonal skills directly from their involvement as a volunteer in the program. Through their own learned experience and interactions with past volunteers, many volunteers had developed coping strategies in the face of vulnerability or periods of increased risk of lapse/ relapse:

Listening and talking, we do not focus on gambling however in quiet times with people when you are actually doing one on one quite often they will lead into their stories and you have to listen, but then try and provide the positive spin on what's happening or what they can do. I mean every story is different but it's easier to say well look this is a couple of strategies that I came up with to make my life easier (F-05).

By being thrust into various social and interactive spaces, a number of volunteers reported being pushed out of their comfort zone. This, in turn, forced them to work on the development of necessary communication skills. As every new participant group contained new individuals, the volunteers interacted with a variety of personalities, temperaments, and age groups. This variety made the volunteers more versatile in the informal support they provided: My role so far has been more that I have gone and helped setup, or just talking to participants, which I am becoming more and more at ease with whereas before I couldn't talk to new people, I really struggled with that because I was out of my comfort zone. If I'm in my comfort zone then I'm fine, but this was something totally new yeah, so it has increased my ability to talk to other people (F-10).

Each volunteer intake provided training that sought to develop confidence and skills that are relevant to the support that they are providing. Other skills developed from the experiences and interactions that volunteers had with the program participants. Skills were enhanced in the process of providing support, e.g., interpersonal skills. The formal and informal training opportunities developed nuanced interpersonal skills like non-verbal communication:

I suppose we seek and we look out for people just from body language, and just whether they are happy and chirpy to be there or whether they are withdrawn and you think they might want to chat or you just wait for your moment (M-02).

Listening was another interpersonal skill which the majority of the volunteers reported developing over their volunteer period. Many volunteers perceived the development of their listening skills to benefit significantly the individuals that they were attempting to support:

I have probably learnt to listen a lot more to what other people actually say. If a person starts a conversation I do not tend to jump to the end of it before they actually finish, because I have probably put my foot in my mouth a few times, you know thinking I know what they are going to say especially on the phone (F-09).

The benefits of personal skill development were not readily perceived as important to their own personal development, but volunteers often suggested that the importance lay in developing skills to aid the participants. Understanding personal boundaries was a skill many volunteers felt that they developed which enhanced the support that they provided:

I think mainly learning about boundaries, because I did not really take that much notice of it before but boundaries is very important, and it makes me a better volunteer to know my boundaries. It is not really a case of people coming in and stepping over my boundaries but me actually overstepping theirs, as in being the participant (F-03).

Whether the intention to develop skills was self-interested or for the wellbeing of the program participants, the benefits derived from these volunteers' skill development were vast and may aid their wellbeing (and that of other participants) far beyond their period of gambling and recovery.

Skill development: Self-efficacy. Psychologist Albert Bandura defined self-efficacy as one's belief in their own ability to succeed in specific situations or to accomplish a task (Bandura, 2010; p.1-3). Often self-efficacy is lost by many problem gamblers who struggle to control various aspects of their lives and no longer feel as though they have the skills that they once had to solve problems. Volunteering for the program helped to nurture high self-efficacy in individuals, as it confronted them with tasks and roles often outside of their comfort zone and provided space for individuals to thrive in these roles. This also helped to unearth skills that were thought to be lost:

I think I have got back a whole heap of confidence and self-esteem, the believe in myself, the ability to understand the skills that I already had, but that they were also useful and could be applied not only here but in other ways as well (F-07).

Volunteering was also recognised by the volunteers as reducing the stigma they felt from their gambling issues and history. The felt stigma from a history of gambling has a direct effect on self-efficacy. The connotations that come with being a gambler are overtly negative and relate to being unproductive. Many volunteers reported currently having public speaking arrangements or had experience as a spokesperson for the media:

Yeah, she put her hand up for a speaking situation, so it shows you, you've got rid of that stigma, it's gone (M-01).

This dramatic change in self-efficacy for the majority of the volunteers came about in the volunteering stage of the program. The participation stage alone did not allow these individuals the time to experiment with the skills and resources that they had been introduced to.

Skill development: Resilience. Psychological resilience is defined as an individual's ability to adapt properly to stress and adversity. The reinforcement and learning that the volunteers received from the program in turn promoted their psychological resilience. An increase in self-efficacy also motivated individuals to pursue leisure opportunities that the program had put forward. Leisure and physical activities are seen as increasing the wellbeing of former problem gamblers, which in turn aided their resilience in the face of stress and adversity:

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Combine this with a physical, "I walk everywhere", go to the gym three days a week, I feel that is so important, and I was very fortune through the YMCA, they donated 12 months for 2 years for what I've been involved in, I've now got to pay my own but I do not mind that. But quite a few others in the same time only went once. Now I try to emphasise that whatever they do to not forget the physical aspect combined with the mental, and emotional, and other things (M-01).

Other characteristics of psychological resilience were identified through the various coping strategies which volunteers reported utilising. These were often highly individual and developed on a personal basis rather than being a learned technique from the program:

I have a housemate who gambles, and occasionally she says to me, "Why do not you come with me?", and I say "Do not even ask me", and it was really quite funny it must have been 6 months ago, something was going on I was stressed about work or something and I got home and I was still in my clothes, and I thought if she's going out I could very well go with her. So I went straight into the bedroom got into my PJs, and that's one of my strategies that I always use, because if I'm in my pyjamas there's no way I'm going out again, and she said "Oh you are you in your PJs", and I said "Yes and I know where you're going and do not tell me anything about it" (F-05).

There was a strong recognition of the triggers that could lead to relapse by many of the volunteers. Volunteers generally met their triggers with various individual coping strategies, such that the threat of relapse dissipated. Psychological resilience and coping strategies are often developed and refined over a long period, well into the volunteering stage of the program. **Skill development: Purpose.** A problematic issue is that apart from gambling, problem gamblers are not typically involved in other activities that embed purpose into their lives. This has consequences for problem gamblers once they cease their gambling activities. These included being left with a considerable amount of unstructured time and feelings of emptiness. A major motivation to remain abstinent came from re-embedding purpose into the daily lives of these individuals. The majority of volunteers reported that volunteering for the program acted to fill a gap where purpose was lacking in their lives. The commitment that the volunteers had made to the participants demanded a constant focus on the wellbeing of these individuals. Volunteer F-04 was addressing 'what if she had never volunteered and only participated in the program?':

I think it would have been a little bit more difficult, even though I had already stopped gambling for a good 6 months, I think not having been kept busy would have then given me too much free time, and then with free time we all know that is dangerous, because then you start thinking what if? And all that sort of stuff. Yeah I really do think that has helped me to stay focused I really do, I think it really helped me to stay focused basically (F-04).

Purpose is also beneficial in that it not only helped former problem gamblers to stay committed to their abstinence, but it also changed the relationship between the recovering gambler and the activity of gambling itself. Purpose can promote moderation and responsibility, whereas a lack of purpose can promote excess and irresponsibility due to a lack of accountability: I do not mind playing a little bit of the pokies, it's not that I do but I will, but I can say no, it doesn't really mean anything to me. I've got the program to concentrate on I've now got a lot of other things happening in my life now and I'm actually doing stuff (F-08).

For many of the volunteers, this relationship with the pokies would not have a positive outcome. Nevertheless, recovery from problem gambling does not necessarily equate to abstinence. Rather, it may be about removing past associations with an addicted identity. Volunteer F-08's new social identity was embedded with purpose and did not resemble that of an addicted individual.

Skill development: Self-awareness. A common thread for many volunteers was that in the midst of their problem gambling activities, their own judgement, perception, and decision making became clouded by a focus on gambling. Volunteering allowed for a reexamination of personal attributes. The role demanded that the individual provided support and utilised interpersonal skills. Heightened self-awareness allowed for a greater understanding of the program participants and the other volunteers and how they might perceive the role of the volunteer. For many volunteers, volunteering tested their strengths and weaknesses and aided reflection on personal thoughts and characteristics:

I've always found that I'm very good one on one with people, it's about understanding yourself and that's the process that I'm going through yeah and that will come with time (M-03).

Self-awareness can often develop through interactions with others, conflict, and problem solving situations. This development was beneficial, in that volunteers were able to

make changes in their thoughts and interpretations. This can often go against the grain of their existing state of consciousness but can yield significant benefits:

I've had a few clashes, mainly with one person in particular, and I just couldn't understand why the communication wasn't working, and then I thought look just back down, accept things the way they are you can't control everything, and kindness and respect goes a long way (F-08).

Self-awareness aided in the realisation that the individual ultimately had control over many aspects of their life, and exercising that control helped to shape future outcomes. Many volunteers reported that volunteering assisted them in letting go of their past with gambling, due to their heightened self-awareness:

I'm very interested in philosophical things; that's almost what my main interest is, like books and magazines. I read all the time, someone's always worse off than me, and try hopefully to help other people coming through, that they have to readjust their thinking, and start to like themselves and what not. And that all sort of developed from the time I became a volunteer, I learnt during that period of time to not concentrate on the past for certain. I think that is a pretty common theme that you have to be in the here and now to cure yourself and enjoy whatever you're doing (M-01).

For the majority of the volunteers, becoming a volunteer was the first time after their gambling problem developed that they had fully focused their attention, emotion, and behaviour on a task other than their gambling activity. As they became aware of their power over the direction of their focus, volunteers became aware that they were not defined by their past activities and behaviours.

CHAPTER VIII

Discussion, Conclusions, and Applications

The literature review in Chapters 2-3 identified that there are multiple and intersecting causes of gambling related harm (Browne et al., 2016; Productivity Commission, 2010). This led to the development and provision of multi-faceted interventions available in Australia (Chapters 4-5). Those interventions aimed to reduce harm caused by gambling for an individual and their families (Problem Gambling Research and Treatment Centre, 2011 ; Westphal, 2008). Even though relapse rates in problem gambling are high – e.g., 75% (Hodgins et al., 2007) – there were few research studies investigating programs specifically designed to focus on addressing relapse risk factors or relapse itself in problem gambling.

The literature review showed that a lack of social connectedness and a lack of recreational alternatives to gambling were identified risk factors for triggering problem gambling relapse (Botterill et al., 2016; Trevorrow & Moore, 1998). The link between a lack of social connections (loneliness, social isolation) and gambling was also highlighted in other studies (Holdsworth et al., 2012; McQuade & Gill, 2012). Leisure substitution has also been explored as a common technique to support cognitive behavioural programs to address relapse in recovery (Dowling et al., 2008). The concept of combining education and provision of leisure activities in a peer-designed and peer-lead group intervention offered an innovative extension to the current treatment approaches available in Australia. The programs developed and trialled in this thesis initially targeted people who had been in counselling for gambling and wanted to achieve long term recovery and reduce their vulnerability to relapse.

People who participated in these programs were a self-selected sample who responded to a recommendation by their counsellor or an invitation to participate through advertisements and brochures. They self-reported to their counsellor as being at a loss as to how to maintain the change of behaviour that was achieved through intensive intervention (Jackson et al., 2012). The program outcome for participants was not prescribed. Rather, it was chosen by each individual participant. The program outcome was either to maintain abstinence or to re-establish control over their problematic gambling behaviour. The model involved introducing participants to new leisure activities, and it encouraged them to participate in educational sessions in a group-peer support context.

The research focused on exploring whether addressing identified relapse risk factors, namely fostering social connectedness and providing leisure substitution, would have a positive effect on participants' overall wellbeing, particularly with respect to their goal of abstinence or control over their gambling behaviour.

The primary outcome for all programs was to deliver a series of group events that included recreational and educational activities. Program participants showed positive changes on many psychological indices. Results showed a significant decrease in feelings of loneliness, increased self-esteem, improved mental health and a reduction in the temptation to gamble across all programs (Tables 11 and 12, Chapter 6). During the first four program versions (Studies 1-4), a number of changes were made to program content, duration, and the role of the volunteers. All changes aimed to further improve the outcomes for participants and volunteers in those programs, while also adhering to funding requirements. Even though the analysis of the data across all programs showed medium to strong improvements across all areas, there were differences mainly due to variations in each program's duration. The most significant positive results were recorded in the first study, RMM, which ran over 12 months. It is important to note that RMM was the only program in which data were collected midterm as well as pre- and post-program. The strongest change was recorded between start of the program and the six-month mark. Results measured after the 12 month period for this program did not show further significant changes in the crucial temptation to gamble measure. The second program MC only ran over six months. The positive results were

equally strong when compared to the six months (mid-term) evaluation of the RMM. The final program, with six short program versions (DTCNW), did not produce the same strong and significant results as RMM and MC on the temptation to gamble measure, despite offering a solid performance on the other psychological indices. It can, therefore, be concluded that a six-month program seemed to be a long enough timeframe to create positive change across gambling and psychological indices.

All programs met the proposed objectives:

- The identification of leisure-related behavioural problems as they related to problematic gambling behaviour and their causes;
- The identification of the desired changes in leisure attitudes and behaviour to alleviate the behavioural problems as they relate to problem gambling;
- The development of individualised programs of recreational activities that facilitated the integration of participating in leisure activities in a group/community setting;
- The provision of social scaffolding by project volunteers, which initiated and supported the involvement of participants in organised activities; and
- The development of community contacts and access to places that encouraged participants to participate in those activities on their own, after the completion of the program.

Once the initial program details were developed and the specifics of the target group of people who were harmed by gambling were decided, the content of the program was developed. This development process of the content for the programs focused on selecting activities and educational content aimed to support the participants in developing increased confidence, self-efficacy, and motivation to achieve their defined goal relating to their problematic gambling (i.e., abstinence or control over gambling). An organic process of program development was followed, such that learning from each program informed the content of the next program. A major goal in the development of the programs was to ensure consistency of client participation, which was achieved through the use of volunteers throughout all programs. Although this thesis presented several statistically significant and theoretical findings, there were some limitations. The following sections will explore four key elements of the research – the program, project management, program funding, and participants and volunteers – and discuss their advantages and disadvantages considering the reported findings.

Group - Program to Address Relapse Risk Factors: Lack of Social Connections and Leisure Substitution

The quantitative and qualitative findings across all programs confirmed that addressing social connectedness and providing leisure substitution during the provision of a structured program lead to significant improvements in areas of social connectedness and mental health for participants across all programs. This supported the findings of other researchers in addiction recovery (Binde, 2012a; Boisvert et. al., 2008).

To date few studies in the gambling addiction recovery have specifically investigated ways to address the generally accepted 70% relapse rate in problematic gambling (Hodgins & el-Guebaly, 2004). Since Hare (2009) explored *Problem Gambling from a public health perspective* in Victoria (Australia) more resources and focus in Victoria have been given to the development of preventative interventions but not many have tackled 'relapse prevention'. Hare (2009) study highlighted the fact that problem gamblers perceived that an increase in leisure interests and (re)connecting to a wider social network were useful strategies to prevent relapse, not many programs have been developed to address these factors. The five programs, including the volunteer study, presented in this thesis attempted to address those factors and the findings of all studies described the benefits for participants. The intervention targeted people who were in the maintenance phase (Prochasca & DiClemente (1983) of recovery and referrals to the programs were mostly through professionals working with the clients to address their issues with problematic gambling. This was important to ensure that participants were professionally assessed to fit the criteria and found not in any danger to harm themselves and/or others. Therefor the group intervention model presented in this thesis was in most parts complementary or an add-on to therapeutic counselling and not aimed of being instead off therapeutic interventions.

Peer support groups or self-help groups in supporting problem gambling are an emerging trend to assist people who do not want to attend therapeutic counselling sessions. Examples of some available peer and/or self-help groups in Victoria, Australia are detailed in Chapter IV 'Peer Support Programs'. Peer support groups are an effective way of normalising the 'problem' and are led by persons who lived and recovered from similar experiences (Contole et al., 2015). The programs discussed in this thesis were led by the author, who had lived experience with gambling related harm and took on the program management role as a program manager with lived experience of gambling related harm. This was a different approach compared with other peer-lead groups, where the group is responsible for the direction and content of the program and the leader then facilitates (Gitterman & Shulman, 2005). The effectiveness of the group work was enhanced because author who developed the three of the four programs including the volunteer study possessed knowledge about facilitating group work as a professional as well as being part of the group because of here lived experience (Flores, 1997). Her leadership style focused on empowerment-oriented practices and lead all groups from a strengths-based perspective (Kurland and Salmon, 1992) applying a public health approach rather than a disease model philosophy (Griffiths, 2005).

A very important part in developing the program was to include 'volunteers'. Utilising the 'helper therapy (Riessman, 1965), and what Luks, 1988 described as 'helper's high', where the volunteers are very engaged in helping others but driven by a deep concern about their own recovery added another dimension but very important element to the program design. Participants of all studies saw this as a very important part of the program as the volunteers provided an empathetic environment of support (Luks, 1988; Magura et al., 2002).

Literature is quite clear that not all recovering individuals need professional services to recover, but they do need support to develop a new sense of identity and self-concept, particularly with respect to visualising themselves working towards new life-goals (Petry, 2005b). Program participants were referred by health professionals, who kept a strong interest in the program and their client's well-being. This resulted in many cases that participants were willing to continue counselling if needed and provided a platform to offer access to other help services if it was required. Because of this, and in the absence of a control group, it is, therefore, not possible to say that the observed positive changes were solely caused by the intervention or by counselling and/or other influencing factors.

As noted above, one limitation of this research was the fact that the program evaluation model that was adopted was not able to trial the intervention and compare results with a control group. To trial this program and recruit a control group was deemed by the funding agencies to be unethical. In Australia, all Gambler's Help services are free and, as such, it would not be possible to recruit suitable participants without offering them an intervention. Another limitation was that it was not possible to match the demographic characteristics of the participants of the individual programs to each other or to a control group. Due to the different funding bodies involved in program development, planning, and implementation, the psychometric scales that were used to collect data varied. They were chosen according to the specific program outcomes which the funding bodies had requested, as well as being determined by the different program designs. The analysis was only based on scales administered across most of the programs and only included data from participants who completed the program. The author, in consultation with various reference group members, was responsible for deciding the measures used, collecting the pre and post program data, running three from four programs, and then analysing the data in the context of providing evidence to support or reject the implied program outcomes of this thesis.

Program Focus

One other significant point of difference with the program, compared to other group interventions, such as Gamblers Anonymous, was the fact that problem gambling was not the focus of the intervention. That said, all such groups, including Gamblers Anonymous, see the value in people who have experienced the problem directly, as they foster more empathy and more self-disclosure (Luks, 1988; Magura et al., 2002). Nevertheless, the decision to exclude a 'story-telling' part in this program was based on anecdotal evidence. Specifically, because problem gamblers were consulted during the design stage, it was found that many people eschewed talking and listening about problem gambling stories. These triggered strong urges to gamble afterward. Therefore, the design for this peer support program intentionally did not include sessions where gambling and related problems were discussed. Educational sessions included general information about 'addiction' and the manifestation of addiction in the brain and taught participants strategies for creating change. However, these sessions were not gambling specific. This restriction was beneficial for some participants but not for others. It is not possible to control conversation topics, and participants self-disclosed often to each other. The need to talk about personal experiences with harm from gambling was very evident among those participating the DTCNW program version. The study population of this program was varied with respect to their experience of addressing their gambling problem and, therefore, participants had different needs.

Project Management

In the section Program Development – Program Design, the author explained the characteristic and necessary skills that were required to facilitate this innovative relapse

prevention model. Activities, such as games, singing, social outings etc. were used to build group bonds and supported the participants to improve in their own social skills. The selection of the appropriate group activities was the responsibility of the author/program manager. After the initial RMM program the program manager/author took into consideration how successful the activities were with the participants (Gitterman & Shulman, 2005). The author program managed three of the four programs and selected the activities for all four. For the third program, MoreConnect 2, an external program manager was recruited, and the author of this thesis took on the role of a supervisor. While the author (and program manager for RMM, MC1, and DTCNW) had lived experience with problem gambling, the employed program manager of the MC2 program did not. She was a qualified social worker with 10 years of experience in running various programs. The volunteers of Studies 2, 3, and 4 were participants from previous program versions. Therefore, there was an established relationship between the author and the volunteers. The program manager of Study 4 met participants and volunteers just before the start of the program. The more established relationship between the author of this thesis (program manager of the first two programs and the volunteers) led to some complication. Volunteers, who had been participants of previous programs, compared the different leadership styles and event coordination skills, and this caused some unrest within the group. It is not possible to attribute clearly any difference in findings to the factor that program three was run by a person who did not have lived experience with gambling. It is important to mention, though, that the author and program manager played an important role in all four studies. In the first program, RMM, the evaluation highlighted that the program manager was vital for the success of this program. The qualitative findings highlighted that it seemed to be an important factor for the program manager to have lived experience with gambling related harm.

Lead-time

One of the key differences between the four program versions was the lead time to the commencement of the program. The lead time was six months for the first version (RMM), three months for the second version (MC1), 10 weeks for the third version (MC2), and six weeks for the fourth version (DTCNW). The first program (RMM), which had almost six months lead time to work on the marketing of the program, recruited a significantly larger number of participants and volunteers. Participating in a larger group program compared to a program with a small number of participants and volunteers increases the possibility for individual connection with other group members.⁹ This connection, and an establishment of rapport, enhances the chance of participants wanting to return to the group and increases the consistency of their attendance rate. The longer lead time in the first program also meant that there was no recruiting after the initial join-up weekend, so all participants attended the joinup weekend with no new recruits after this time. Studies 2, 3, and 4 struggled to recruit numbers for the commencement of the program and, therefore, needed to accept latecomers. Even though every effort was made to engage and include new participants at a later stage in the program, it was definitely a challenge for the whole group who had already bonded, especially during the weekend away. Averaging the overall budget over more people, and being able to claim larger group discounts, also led to a significant reduction in the per person cost, which was a result of a longer lead time.

Program Funding and Location

The first program, RMM, was held in 2009 in the eastern suburbs of Melbourne, with the next three programs conducted in north and north-western suburbs of Melbourne. According to data supplied by the Victorian Commission of Gambling and Liquor Regulation at the time this research was conducted, the Eastern suburbs of Melbourne showed a problem

⁹ Recall that the DTCNW program version was split in to sub-version deliveries.

gambling prevalence rate of 0.3% with an SEIFA index of 1,065. The SEIFA (socioeconomic indexes for areas) index is 'a method of determining the level of social and economic wellbeing in each region' (ABS 2008). This compared with a much higher problem gambling prevalence rate of 1.2% in the north western suburbs of Melbourne and a significantly lower SEIFA score of 1014.

The funding was provided by a Gambler's Help service and Chrysalis Insight Inc., a not-for-profit that the author of the thesis funded and chaired. This was the only program in which the program manager was employed by an agency to deliver the program, and the place of work was located within the agency. This resulted in a strong relationship and support for the program by the counselling staff and enabled the recruitment of the largest group of participants to the program.

The funding for Studies 2 and 3, MC1 and MC2, was provided by a local government north of Melbourne. One of the conditions placed on the funding for those two programs was that participants should either be living and/or working in this particular local government area. The motivation for this clause in the funding contract was two-fold. Firstly, the program had to benefit people who pay local government taxes in the area. Secondly, all of the program's recreational activities were organised using facilities within this local government area, so participants were more likely to continue using them once the program was finished. As stated earlier, the largest source of referrals were gambling and financial counsellors from various services across metropolitan Melbourne. It is known that many people accessing gambling help services do not actually live and work in those areas. For Studies 2 and 3, this led to people being referred to this program who did not fit the funding contract requirements because they neither worked nor lived in the local government area. It was very difficult to recruit a sufficient number of people, so participants were accepted into the program even if they did not meet the criteria of living in the area. The only condition was that they were willing to travel and agreed to attend as many sessions as possible.

The program version DTCNW (Study 4) was funded by the Victorian Responsible Gambling Foundation under a prevention scheme grant. One of the funding conditions was that the program should run in the north-west of Melbourne. The main reason for selecting this area included its population being at higher risk of experiencing problem gambling related harm, due to various risk factors present in those areas (Appendix A).

All programs were designed to address two major risk factors attributed to relapse: lack of social connectedness and lack of leisure substitution. The outcome definition differed across the program versions because funding provided was different and contract agreement specified some variations in outcomes. To evaluate complex community-based programs, such as this program, required more financial resources than were provided. Budget restraints and making sure that organisational agendas did not dominate the process was a challenge.

The first program, RMM, provided the most professional support. This resulted in recruitment of a clearly defined target group and also delivered the most robust data. One of the reasons for this included that all program participants were screened by qualified counselling staff from a Gambler's Help service. The referring professionals understood exactly who this program was recruiting. Another reason was that, for the duration of the program, the program manager was located at the counselling service site and worked at the service as part of the team. Any challenge that became apparent while running the program was collectively discussed with other professionals and solved.

This was not the case in the other programs. Even though the other programs were overseen by a reference group and were partnership programs, the program manager was working in isolation without access to immediate support. The referring counsellors were briefed but did not have the same involvement as the RMM staff. Therefore, some of the

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referred participants did not match the criteria for the target group, which changed the dynamic of the programs and, possibly, the outcomes. Collaboration between participating organisations, such as government and the not-for-profit sector, was sometimes difficult because of a difference in structure and reporting requirements. Even though there is now a definite shift in Australian governments' handling of funded organisations, the role of the funding organisation at the time of the last program (DTCNW) was more of a contract management than an enabling role.

Participants

One hundred and five participants were recruited and participated in four different versions of a program aimed to reduce the risk of problem gambling relapse. The target group were those who were in, or were moving into, the maintenance stage of the cycle of change (Prochaska & DiClemente, 1983). All programs aimed to assist participants either to abstain from gambling or to control their gambling behaviour, depending on their own defined outcomes. Having identified social isolation and a lack of motivation to engage in alternatives to gambling as key risk factors for relapse, the focus of all program activities was to address these risk factors in a safe group environment supported by volunteers (Jackson et al., 2012; Symond, 2003). Literature identified that a lack of social connections is one of the reasons why people are vulnerable to relapse (Holt-Lunstad, 2017). Participants were made aware from the onset that this program was not therapy. Rather, they were responsible for the outcomes they wanted to achieve, e.g., abstinence or controlled gambling. The message that 'this program will support you in re-engaging with other people, places, and, ultimately, yourself' was based on a strength-based approach, pre-empting that people are able to recover rather than reinforcing a pathology. Both quantitative and qualitative findings showed positive results on all key indices. Participants expressed that this program provided them with social connections and other things to think about in a safe and supportive environment.

The recruitment strategy for program participants proved to be a very important factor for the program's success.

The recruitment of participants for the programs involved two pathways of referral: (1) self-assessment of participants asking their counsellor for ways to address their lack of social connectedness; and (2) direct referrals through problem gambling counsellors who assessed lack of social connectedness as a risk factor for relapse in their clients. The main criteria for acceptance into the program was that either a counsellor and/or client themselves identified social isolation and a lack of leisure substitution activities as risk factors for relapse.

However, the recruitment of participants for the DTCNW program version changed these criteria. This program ran six times within a 15-month period. The duration of each program was 10-12 weeks, with about 10 weeks being the norm. Recruitment of participants for those six programs involved not just referral but also external advertising through newspaper and other media. This resulted in the recruitment of participants who were not screened for suitability by a qualified health practitioner. Applicants in the DTCNW program were interviewed by the program manager who, in most cases, made the assessment about suitability for the program based on 'first impression' and experience in working with participants in previous programs. As part of a risk management strategy, it was important that the recruitment process included referral options of a qualified health practitioner when/if the program manager was unable to make the assessment or was uncertain about a client's suitability. As the timing of the recruitment for one program overlapped with the running of another program, it became more difficult for the program manager to spend time on the recruitment of suitable participants. This change in the program design regarding the recruitment process in DTCNW resulted in an enrolment of participants who had not addressed their gambling problems in counselling, who were not referred, and who responded

to the advertising. The program manager, who was responsible for the initial assessment of the participants in DTCNW, did not have appropriate qualifications for conducting a psychological assessment of a participant. In light of these variations to the recruitment process, it was difficult to compare the findings across all of the programs.

All programs aimed to offer participants and volunteers structured leisure and educational activities in a group setting. The social activities were chosen to provide participants with the hands-on experience of a range of activities that they were able to continue after completion of the program. It was therefore important to utilise low and/or no cost facilities to provide those activities. The lack of financial resources due to previous gambling related financial harm was a barrier for many participants. This was particularly true for those who were in the maintenance stage of recovery and struggled with the cost of day-to-day living as well as the repayment of their accumulated debts. The qualitative component of the research demonstrated that this was an important consideration when selecting program activities. Many participants across all programs took up activities outside of the structured program, which indicated that participants' improved self-esteem, social connections, and self-efficacy enabled them to re-engage in the community without gambling. It is not possible to say how long participants kept up this engagement, as this research did not include permission to follow-up after completion of a program.

The educational sessions were structured to provide participants with concrete opportunities for learning and to support (re)building social and life-skills. These workshops included sessions on goal setting, improving communication skills, budgeting, and general confidence building exercises, which were all delivered in a safe, group environment. Similar to the findings related to social activities, participants expressed improvement in areas of confidence, self-worth, and resilience. The data also demonstrated that all four programs achieved positive results in areas of social connectedness and mental health, which were primary areas that this intervention targeted. Even though the analysis showed significant improvement across all psychological indices, the first program, RMM, showed the strongest change in the temptation to gambling scale.

Except for the last program, the target group were participants who had addressed their gambling and had entered the maintenance stage in recovery (Prochaska & DiClemente, 1983). The last program aimed to recruit participants that were either in the maintenance stage or at the other end of the spectrum. People who were 'at risk' of experiencing harm from gambling were also recruited. The funding agreement specifically wanted to explore whether addressing leisure substitution and social isolation would prevent people from experiencing gambling related harm related. DTCNW's 'Balance what you do for Fun' was the tagline that was advertised through various forms of media. However, participants who responded to these advertisements were 'problem gamblers', not 'at-risk gamblers' as anticipated. The point of difference was that, even though they acknowledged issues related to harm caused by gambling, which was also reflected in their PGSI score (mean = 16.48; median = 18; range 0-27), they either did not want to engage with a professional help service or they reported negative experiences when they had attempted counselling before joining the DTCNW program

The support volunteers, all of whom had been participants in previous programs, seemed to gain further benefits for their own recovery from their role as volunteers. This observation made by the author during the running of the first four program versions initiated the fifth study, the 'volunteer study'. This study aimed to research the validity of this observation. The volunteer study's findings indicate that the volunteers were motivated by different but overlapping factors, depending on their level of recovery from their problem gambling. This was illustrated in the 'volunteer motivation conceptual model' documented in Figure 9. It is important to emphasise that it was not an original intention of this study to

produce such a conceptual model, but it was developed from a thematic analysis once themes were arranged in a network. The implication of the Volunteer study and possible application will be discussed in the next section.

Volunteers

Of the 15 support volunteers who attended the first event, the weekend away with RMM, none had lived experience with problem gambling. Only two continued for the duration of the program. This did not create long term problems for the success of the RMM program, however, because the participants bonded well, supported each other from the start, and continued to do so over the length of the program and for many years after. At the completion of the first program, RMM participants enquired about the possibility of volunteering for the next program. As a consequence, all consecutive programs involved participants of previous programs as volunteers. The retention rate of those support volunteers (ex-participants) was nearly 100% throughout all programs. Exit interviews were not conducted with volunteers of the first program, who had no experience with harm from gambling. In retrospect, it would have been helpful to find out why so many of the nonproblem gambling affected volunteers did not feel motivated to continue as support volunteers. However, the reasons and motivations behind participants wanting to become volunteers, sometimes for two or three more programs, was explored in the volunteer study and is discussed in the following sections.

This part of the research indicated that volunteering for any of the peer support relapse focused programs provided significant benefits to an individual's recovery from problem gambling. The sample was a small convenience sample, so it is not possible to generalise the findings. Yet, this kind of research provided a snapshot of participants' experiences and development of a volunteer motivation conceptual model (Figure 9), which has the potential to provide practical applications for new integrative treatment approaches.
Furthermore, this model could help to build a foundation to explore volunteering as a standalone treatment and/or an add-on to therapy in further research.

The volunteer study's findings indicated that the volunteers were motivated by different but overlapping factors, depending on their level of recovery from their problem gambling. This has been illustrated in the volunteer motivation conceptual model, which adds to the literature on volunteering and recovery. This model effectively demonstrated how benefits associated with the program for an individual's recovery were dependent on current factors motivating that individual to volunteer. This is also represented through a parallel relation between the motivation and benefit themes concerned with where the focus of the volunteers was placed. Hypothetically, a volunteer was motivated due to an empathic connection that they had formed with certain participants. This focus on others gave volunteers a helper's high, as outlined by Luks (1988), strongly benefiting that individual's wellbeing. Therefore, if the volunteer is predominantly motivated to build their social connections and friendships, they are more likely to derive greater social capital from these networks. The five benefit themes were all connected to motivation themes. This suggested that, no matter what current factor drove an individual to volunteer, their involvement as a volunteer had the potential to benefit their psychological resilience, increase their selfefficacy, instil purpose, promote skill development and increase their self-awareness.

The developed model demonstrated a general starting point and could be interpreted as if the volunteers all started at the same point and moved through the stages in similar fashion, depending on the stage of their motivation to volunteer. However, the volunteer journey may have started at any motivation stage, as previous stages may be perceived to have already been satisfied from the program participation stage. The factors that motivated these individuals to commence volunteering were perceived to improve their overall wellbeing. By addressing these factors through volunteering, the volunteer tried to cultivate a

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life beyond their problem gambling and safeguarded themselves against future potential relapse triggers. The visual representation of the model may also suggest that volunteers only identified belonging to a singular stage of motivation to begin with and only moved to the next stage when the last stage no longer provided motivation. However, this is not the case, as the volunteers often articulated that they felt motivated by multiple stages simultaneously. The linear fashion of this conceptual model had the intention of demonstrating the general order of the stages in which volunteers felt compelled to volunteer for the program. Progression through each stage of motivation was dependent on the discretion of an individual volunteer, as each volunteer's recovery journey was recognised to be inherently different. Some volunteers highlighted that they felt that they had made significant efforts on their recovery in the participation stage, and they needed volunteering to reinforce what they had learned and to be reminded of their progress. Others voiced that they predominantly existed in the social inclusion and friendship stage for a significant period of their volunteering.

No matter at which stage they commenced volunteering, the outcome of their progression through the motivation stages was that they arrived at, or were going to arrive at, the focus on future stage. The focus on future motivation theme was connected to the leadership motivation theme and the focus on others' benefit theme, as it represented the end of the model and the exit point from the program for the volunteers. Without progressing through each stage of motivation and having a clear focus on their future potential direction beyond the program, the volunteer may not have received the full set of benefits from the program. This exit point is symbolic of that individual's completed recovery from their state of problem gambling. Existing in the focus on future motivation stage did not equate to a volunteer being completely recovered. Rather, it was indicative of other motivating factors being satisfied through their volunteering efforts.

As mentioned above, the recovery motivation stage refers to satisfying the action stage before the individual can move on to the maintenance stage. However, beyond this, recovery is referred to the volunteer's successful progression to the termination stage in the transtheoretical model of change. This further added to the ambiguity of recovery and the complexity of identifying when the volunteers had actually reached complete recovery. Recovery is a diffuse concept that has been inconsistently determined and has been plagued by a lack of conceptual clarity in the literature (Nower & Blaszczynski, 2008). This study has conceptualised recovery in the previously mentioned contexts in order to avoid a potential lack of clarity in the analysis. A volunteer may have lost all temptation to gamble and experienced a dramatic rise in self-efficacy but still volunteers their time because they enjoy supporting the program, using their expertise in certain areas, e.g., administration. In contrast, another volunteer may have a concerted focus on their future but does not have the creative confidence to carry out their aspirations and could slip back to a vulnerable state. Some volunteers were recognised to have reached the termination stage, as they have a focus on their future potential and direction and have acquired the skills, confidence, and resources that functioning as a volunteer can provide. Others perceived that they had reached such a stage because they had a focus on their future, but in reality they lacked meaningful livelihood options. Volunteering is recognised to be a pathway to termination, as all the factors that originally motivated these individuals to volunteer in turn help embed purpose, commitment, and connection into their lives. Volunteering aided recovery predominantly in the context of helping the volunteer foster a new rich and meaningful life beyond gambling. Providing the volunteer with multiple avenues and opportunities to develop a rich life is recognised as the best defence against relapse or using gambling as a coping strategy.

Focus on self. The findings based on an analysis of volunteer statements evidenced the observation that the volunteer component was as important, if not more important, than

the initial participation stage of the program. The volunteer component was not limited to a finite timeline in the same way the original program was bound. The first program (RMM) envisaged working with volunteers who had no lived experience of gambling related harm. The low retention rate of those initial volunteers made it obvious that empathy and a will to volunteer to a program might not be enough (Jackson et al., 2012). This led to a change in the model and led to the recruitment of volunteers who had lived experience of gambling related harm, most of them participants of previous programs. Some of the volunteers emphasised the advantageous nature of this, as their recovery progress had taken longer than initially expected. Continuing on as a volunteer would directly aid their own recovery. In general, when participants decided to take on a volunteer role they were still vulnerable to lapse/relapse. They were still motivated by their need to address and work on their own recovery from problem gambling. Once this risk had been mitigated, through further skill development, confidence building, and a general feeling of comfort, it was recognised that the volunteer moves from the action stage to the maintenance stage of the transtheoretical model of change (Prochaska & DiClemente, 1983).

The model classifies the action stage as having made overt modifications to one's lifestyle for approximately a six-month period. This is problematic for individuals who may have experienced a significant relapse event while in the action stage and, especially, for the participants in the program version (DTCNW) with a shorter 10-12 week delivery. If these individuals do not volunteer after their program participation, then they may not reach the 'maintenance' stage, placing the long term effectiveness of the program for these individuals into question. Having sufficient time to complete the action stage on an individual basis was an advantageous function of the program's volunteer component. The volunteers who initially existed in the action stage were still recognised to function effectively in a volunteering role and simultaneously address their own recovery (Magura et al., 2002).

Ideally, the participation stage of the program represents the action stage, which functions to strengthen commitment to change, transitioning individuals to the 'maintenance' stage.

However, in reality, many volunteers are not in the maintenance stage when they initially commence volunteering, making the identification of this transition ambiguous. Once functioning as a volunteer, this transition to the 'maintenance' stage was recognised to be self-defined and encouraged through the process of individual social identity change. Once the volunteer solidified a social identity associated with recovery, and removed past associations with an addiction identity, they were recognised to have transitioned to the 'maintenance' stage (Buckingham et al., 2013; Dingle et al., 2015).

The findings demonstrated how important the process of social identity change is to a successful recovery from a state of problem gambling. An association with a volunteer identity helped leverage a reshaping of the self (Reith & Dobbie, 2012), and it further compelled the volunteers to remain abstinent. The volunteers in this study have redefined themselves relevantly to their contemporary sociocultural settings (i.e., the volunteer group) (Dingle et al., 2015; Kellogg, 1993). These individuals may have not felt motivated initially to volunteer to stay a part of the social group but, being a part of a social group of other reformed problem gamblers, helped to solidify an identity associated with recovery and functioned to remove past associations with addiction (Reith & Dobbie, 2012).

This is recognised to be a critical function of the volunteer group, as the volunteers generally reported that volunteering alone promoted the start of their changing identity. Many volunteers articulated that they perceived themselves to be isolated from social groups outside of the volunteer group and their past gambling activities. This highlights a critical linkage between the volunteer social group, the volunteer's social identity change, and a volunteer's recovery. Being a volunteer in the program positively contributed to an individual's recovery, because individual social identity change may be difficult to leverage

without inclusion into a social group, such as the volunteer group in this program. Despite growing attention towards the positive impacts group membership can have for health and wellbeing, little research has explored the impact that social identity transformation can have for those recovering from addictions such as problem gambling (Buckingham et al., 2013).

Focus shifts. For many of the volunteers, having extra time to focus on their own recovery was an essential part of volunteering, and they were motivated predominantly by this to volunteer until it was satisfied. However, for a majority of the volunteers, their severe long term gambling addictions had eroded their feelings of purpose, their social world, and their self-efficacy. They may have felt recovered from the grip of their gambling addiction, but this lack of purpose, social isolation, and worthlessness remained present over the long term. Canadian psychologist, Bruce K. Alexander and his colleague (1982) conducted a study into drug addiction known as 'Rat Park'. Alexander's hypothesis, which the present study's results appear to support, is that addiction is more attributable to a rat's social environment and living conditions than to any addictive property of the stimulus itself. Without sufficient mental stimulation, socialisation, and the possibility of mating, the rats were more inclined to drink a morphine laced water solution. This demonstrated that environmental conditions can influence the potential for addiction and the importance of satisfying the need for socialisation, recreation, and mental fulfilment (Alexander & Hadaway, 1982). Often the reasons why certain individuals, especially older persons without a partner (see Chapter 6, 'Quantitative findings'), develop significant problems with gambling is because they turn to gambling to fulfil their mental health, recreational, and social needs (Southwell et al., 2008). If these were the factors which compelled individuals originally to commence their gambling activities, then they must be addressed in order for the individual volunteer to be safeguarded against future potential relapse events. The volunteers reported that volunteering for the program was an avenue via which these needs were simultaneously addressed.

Many volunteers readily highlighted that they were so consumed by problem gambling that they became completely detached from processes of socialising and friendships outside of gambling (Symond, 2003). For these individuals, fostering new friendships and social connections can be very difficult because they have a limited range of social environments that they can access and in which they feel accepted. Most of the volunteers saw the advantage in volunteering because it functioned as a social environment in which they could make strong connections via bonding over a common goal. Generally, the volunteers recognised how informal support received through their volunteer group social connections significantly mediated their potentially destructive gambling behaviour (Dingle et al., 2015; van der Maas, 2016). Many volunteers articulated that the social connections they had made while volunteering would remain in their lives over the long term. Although unsubstantiated, this could have a positive impact on the long term efficacy of the entire program, as these volunteers could call on informal support well beyond their or their supporting individuals' volunteering period. The volunteers generally felt a sense of belonging to the volunteer group and that the group shared a strong team mentality. Sharing a team mentality increased the volunteers' perceived social inclusion (Boisvert, Martin, Grosek, & Clarie, 2008) and determined that they would continue to have a vested interest in group members' wellbeing. Generally, the volunteer initially provided informal support to program participants, but they were also functioning as a volunteer in order to satisfy their own healing. However, the emphasis also changed, from predominantly focusing on the self to others. This was driven through volunteers' perceived group membership and wanting to satisfy their perceived role in the volunteer group. By satisfying feelings of inclusion, the volunteers had greater capacity to shift their focus towards others and to foster empathetic connections within the group and with the participants.

Interpreting the findings further, it seems possible that the program acted to fill a gap of purpose that was lacking in volunteers' lives. The commitment that the volunteers had made to the participants – e.g., to remain a role model – worked to give purpose to their efforts to remain abstinent. The volunteers were concerned that, without volunteering, there would be a 'void' or lack of purpose in their lives following their completion of the participation stage of the program (Wood & Griffiths, 2007). Generally, the volunteers reported desiring more meaning in their lives following the completion of their program, often prompting them to volunteer. The volunteers recognised that, without ongoing commitment and purpose in their lives, they would be vulnerable to falling back into their old problem gambling habits (Hodgins & el-Guebaly, 2004). The volunteers articulated that their newfound purpose came from their commitment to provide ongoing informal support to the program participants and the positive example they perceived that they were setting. This newfound purpose was constantly reported to have a positive impact on the volunteer's recovery from problem gambling.

All the volunteers expressed the view that they had developed various skills while functioning as a volunteer. These included a plethora of new interpersonal skills as well as the recovery of skills that may have been forgotten or have thought to have been lost. The development of these came through the various training opportunities provided by the program, as well as through their informal support responsibilities. The volunteers readily recognised how their development of interpersonal, coping, and social skills would directly aid their own situation, but they were more concerned with how the development of these skills would influence their provision of support. This highlighted the power of empathy as a driver for involvement, once a volunteer had moved beyond the action stage. The volunteers equated the development of these skills with greater confidence, which is essential in order to manage a non-gambling life on their own (Jackson et al., 2012). The volunteers valued the coping skills which they had developed over the course of their involvement with the program and readily shared examples with the participants. Even from the commencement of their volunteering, there was an undercurrent of empathy evident among the cohort of volunteers which connected them with the participants. While, at commencement, the volunteers were primarily concerned with their own recovery, the further development of their interpersonal skills and confidence equated with a greater capacity and desire to assist the participants. This heavily promoted their shift in focus towards others' recovery and wellbeing.

Focus on others. Unlike other peer support gambling groups, such as Gambler's Anonymous (GA) and the SMART recovery program, the program developed and trialled in Studies 1-4 is structured so that volunteers have the opportunity to be mentors to the program participants and other volunteers. Unlike GA, where new participants were matched with a long term participant, volunteers of this program supported participants as a group. Peer mentoring is different from peer support, as it is provided by individuals who have successfully dealt with, and recovered from, the same condition, and therefore function as appropriate role models. Peer mentors can be seen as a more flexible and informal way of providing effective peer support. However, the research in this area comes from chronic disease treatment literature and the mental health field. This volunteer study has demonstrated the various advantages of providing mentoring opportunities within the trialled programs. The volunteers recognised the value of the informal support they provided to the participants and other volunteers. Many volunteers articulated that they put emphasis on developing problem solving skills, assertiveness, and communication skills, including empathic listening (Heisler, 2007), in order to improve the efficacy of the support they provide.

Although they may have been driven on to develop these skills in order to support others, these qualities assisted many volunteers, in turn, to develop fulfilling lives outside of their previous gambling activities. The social connections and friendships made between the volunteer group members also allowed opportunities for mentoring, as some volunteers still required regular informal support. The volunteers who still required regular support articulated that, while they still effectively functioned as support for the participants, they had the intention of developing the confidence and capacity eventually to assume a mentoring or leadership role within the program. A common denominator for all the volunteers was that they had a desire to contribute to the program in return for what they had received in regard to their own recovery.

Many volunteers were aware that empathy was a major factor that maintained their motivation to volunteer once their own recovery had been satisfied. The volunteers' long term commitment proliferated from the empathic connections they made with the participants, the volunteers, and the program manager (Pillemer, Landreneau, & Suitor, 1996). Most of the volunteers recognised the value of the informal support that they had provided to the participants and this, in turn, was a motivation for their continuing involvement as a volunteer. The volunteers readily understood that, as they had experienced the issue directly, they would foster greater empathy and self-disclosure among the program participants (Luks, 1988; Magura et al., 2002). The volunteers were aware of their impact. They readily reported receiving a helper's high from witnessing changes and progression towards recovery from the participants (Luks, 1988). Some volunteers also articulated that the high they received from this role has had a direct impact on their own self-efficacy and confidence. Instilling selfefficacy and confidence is key for the volunteers to manage a non-gambling life on their own (Jackson et al., 2012). Some of the volunteers were involved as participants in the first program in which the volunteer cohort consisted of non-gambling persons, such as health professionals. These volunteers reflected on how the informal support they received was adequate at the time but paled in comparison to the advantages that empathetic peer support provided to the participant and volunteer cohorts. Empathy was an integral element that underpinned the function of the volunteers and their continuing drive to remain a part of the program.

Focus on future. Some of the volunteers articulated their aspirations for the future or had considered their future goals beyond volunteering for the program. In the conceptual model (Figure 9), the focus on the future stage was recognised as the exit point from the relapse focused program. Without a clear idea of their future aspirations beyond the program, however, the volunteers signalled no desire to stop volunteering and shared the belief that they still needed the program. These volunteers often did have aspirations for the future but perceived that they would still be wanting to be involved with the program. The common linkage between the volunteers who did articulate their aspirations for the future was that they existed, or had previously existed, in a leadership role within or outside the program. The volunteers in these positions generally pursued these opportunities themselves. However, the program structure also motivated and encouraged volunteers to take advantage of these opportunities. The importance of providing opportunities that encouraged leadership and personal development was that it forced volunteers to consider opportunities beyond the program. In the same way that the program delivery was centred on creating and fostering new social and leisure opportunities for the participants, it also took an individualised approach in promoting leadership and personal development opportunities for the volunteers. For example, two of the volunteers were encouraged to run some of the program sessions by the coordinator. The volunteers who were engaged in these arrangements perceived them favourably, as they recognised the benefit it held for their personal development and future

aspirations. Volunteers were also referred to other extracurricular activities, such as speaking seminars, as encouragement to pursue improving their skills and confidence. The volunteers perceived these opportunities and the referral agency function favourably, as they were readily aware of the benefits of being pushed outside their comfort zone.

Volunteer component for future programs. This research raised the question of whether a volunteer component could be incorporated into future programs designed to address the maintenance phase in recovery. This research has highlighted that volunteering in the programs outlined in Studies 1-4 positively contributed towards an individual's recovery from problem gambling. The incorporation of such a component into a program would more closely adhere to the transtheoretical model of change (Prochaska & DiClemente, 1983). However, questions remain with regard to how effective the mandatory nature of the volunteer component would be for individuals who perceive the participation stage as adequate in addressing their recovery from problem gambling. Individual perception may not take into account their recovery journey over the long term and might discount the potential for vulnerability and isolation. Individuals who do not perceive a need to volunteer may not fully realise the set of benefits that volunteering can provide to their wellbeing and, therefore, may discount its importance. Although requiring further substantiation, the volunteer component is recognised to have improved the long term efficacy of the program. The findings indicate that incorporating the volunteer component as a mandatory element of the program would warrant attention.

The volunteer motivation conceptual model summarised the various motivating factors that drive recovering problem gamblers to volunteer. It encapsulated how this involvement produced a variety of benefits towards their recovery. It adhered closely to the principles of the recovery oriented approach (Davidson, Rowe, Tondora, O'Connell, & Lawless, 2008) developed in the mental health field. Consideration is warranted regarding the conceptual model the implications this research has for other peer support focused programs. When compared to the GROW *dynamic change process* model explored in the literature, many similar aspects appeared, including a focus on identity transformation, a focus on wellbeing, a recovery oriented focus, and a focus on social inclusion. The undercurrent of both models is that they were conceived on similar principles to the model of recoveryoriented practice. This implies that, if a peer support group is focused on recovery rather than management, that group could benefit from adhering to the principles of the recovery oriented model. In the chronic disease management sector, the conceptual model cannot be as easily applied because concern is around management of the condition rather than recovery, which voids much of the conceptual model centred on recovery. However, this sector can still derive insights from this study's conceptual model, as those who volunteer/mentor for such programs are motivated through similar factors in the conceptual model aside from recovery. For other problem gambling peer support programs, the volunteer motivation conceptual model could be utilised if such programs wish to develop their own volunteer components. In order to ensure the efficacy of such a volunteer component, the conceptual model could be utilised as a framework. The model could also be utilised in substance use peer support treatment programs due to there being a strong focus on recovery and opportunities for mentoring.

Ethics and limitations. This research ensured that it eliminated recognisable anecdotes in the presentation of data, as these could be recognised by the public unknowingly to the researcher (Gibson & Brown, 2009). Only the author and the interviewer had access to the recordings or transcripts, and data will be stored on a secure Victoria University server for at least 5 years after the completion of the thesis. As this study utilised purposive sampling, the generalisability or (applicability) of this study was considered low as it did not completely reflect the general volunteer population (Krefting, 1991). Risks of employment or

professional harm was minimised by keeping the identity of participants confidential. The consent process emphasised that, if participants became distressed or upset, they would be reminded that their participation was voluntary and they were able to withdraw, reschedule or take a break. When designing this study, the author acknowledged that former participants of the program who did not undertake the volunteering component could be engaged in the research. They were recognised as a cohort that could provide a meaningful comparison of the influence that volunteering has on individual recovery from problem gambling. The author decided against involving these individuals due to logistical and ethical considerations. The author acknowledged that the inclusion of former program participants in this research project may have provided greater insights into the influence that volunteering for the social engagement programs has had on individual recovery from problem gambling.

It is not possible to conclude whether the volunteer cohort would be as tight knit if the volunteers were not people with lived experience of gambling related harm but would have been professionals and people without lived experience. A lack of potential empathic connections could have led to a lack of adequate informal support for vulnerable participants in the program. Another outcome could also be an early drop-out rate of volunteers, as their initial motivation to volunteer could diminish over time, and empathy may not existed between the former problem gamblers and health professionals.

Application for research policy and practice.

The four program versions discussed in this thesis trialled an intervention which, in various forms, was designed to be an add-on to therapeutic counselling, addressing an identified gap in problem gambling service delivery in Australia. However, the real value of this thesis will lie in utilising the learnings of these studies for further research and policy development.

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The positive results of the research highlighted the importance of providing social support and connectedness and programs that focus on strengthening self-efficacy, confidence, and resilience in people who wanted to maintain the change initiated in counselling. The intervention was aimed at people who were at the end of, or close to the end of, their counselling sessions but who had voiced concern about their ability to maintain the change achieved in counselling due to social isolation or a lack of recreational alternatives. Counsellors therefore screened for people in the late action or maintenance stage in recovery from problematic gambling. Further research could be done using a similar intervention approach but targeting people at the low/medium risk category of problem gambling. Help seeking for problematic gambling is very low in Australia, and it would be interesting to conduct a trial to find out if this kind of intervention could work for people who are at low/medium risk but are hesitant to access counselling services. Using a soft promotion approach by offering *just something else to do* and a program for *having fun* with others as an alternative to gambling, might increase help seeking attitudes in people who shy away from conventional counselling. Instead of addressing the maintenance stage in recovery, another version could be trialled targeting people at the contemplation or early action stage in recovery.

The integration of strength-based principles into recovery research and intervention could support people who self-identify as 'gambling too much' to take action and help to prevent further decline into problematic gambling behaviour. Research could be conducted to find out the importance of 'story-telling' in recovery, especially if this could be linked back to a specific stage in recovery. This could provide valuable information about how to structure new programs and improve current interventions.

Another recommendation would be to develop and promote resources that enable people with gambling problems easier access to social and events in their communities at low or no cost. This could also involve offering peer-group support to encourage participation and development of belonging to a community.

Issues to be considered for the development of future programs were highlighted by the findings of this research. It demonstrated the importance of developing programs that focus on cultivating resilience, self-efficacy, and confidence in people experiencing gambling problems. These programs could be integrated and run as add-on programs to mainstream counselling services, or they could be trialled as an intake option. Hence, they might be the first step before counselling. The findings also show that, when developing programs that provide structured recreational activities in a safe environment, it is beneficial to provide them outside a service environment. People do not like to enter clinical health services for a number of reasons. It is important to provide a safe but non-clinical environment to shift the focus further away from the problematic gambling behaviour to a long term recovery program. The quantitative analysis determined that the program added value independently of, i.e. in addition to, the value of counselling. This deserves recognition.

The discussed model was very resource intensive. To ensure the sustainability of these programs, it would be important to develop and implement policies that foster and promote collaborative approaches between all sectors and services. This could include the gambling industry. The aim could be to work together on designing, trialling, and resourcing such programs in collaboration with all stakeholders

Peer-based versus professional recovery support. The findings of the volunteer study in this thesis highlighted the importance of providing people with lived experience of gambling related harm with an opportunity to utilise their experience to support others. Mainstream, institutionalised clinical thinking does not necessarily include *lived experience* as something that could be utilised for improvement of interventions and programs. Rather than viewing peer-based and professional-style recovery support as two opposing models,

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this research suggested that a model similar to the one presented in this thesis could utilise both and could be integrated into existing core government-funded services. Peer-based addiction recovery support is becoming more accepted and popular in substance and other drug addictions (White, 2009). Even though anecdotal evidence suggests that people experiencing gambling problems would prefer to see, and be supported by somebody who has 'been there', developing a career structure around this has not been considered. Exploring this further would mean that people with lived experience may be employed in help-services, involved in co-designing new programs, and/or employed in support and research positions. This of course would require the development of specialised training programs. These lived experience training programs could also be lived-experience driven in partnership with qualified health practitioners, but they could lead to a new service provision which would be lived experienced focused.

To integrate those *lived experience workers* into existing services would require the development of resources such as *Guidelines for Practice* and a *Code of Conduct* for professionals and lived experience workers. This information should be widely distributed and made compulsory studying for all staff to ensure that professional staff have a clear understanding of the role of the lived experience workers in service delivery. This would help to defuse misapprehension among professional staff about a 'job-takeover' and, it would be hoped, change the negative attitudes among professional staff towards involving lived experience workers at all levels of decision making. For this to be a possible outcome, there would need to be strategic planning, involving the full range of stakeholders working together. This would ensure that there is a commitment to invest time and resources, along with participation, in the monitoring and evaluation of those programs.

During the course of conducting the programs, one of the concerns raised by health professionals was that some of the volunteers who supported the participants were still struggling with their own journey in recovery. It was mentioned that their involvement could have negative impacts on the volunteer's own recovery. It was anticipated that the role of the volunteer could induce stress and anxiety and, at worst, could cause them to relapse themselves. This thesis, in particular the volunteer study, provided no evidence to suggest that the psychological wellbeing of the volunteers suffered as a result of interacting with participants. On the other hand, the analysis of the experiences of volunteers who participated in the study demonstrated considerable improvement in areas of mental health, particularly anxiety, self-esteem, and exercise of control. The volunteer study clearly demonstrated the positive impact volunteering had on all involved and that volunteers' recovery was strengthened not weakened in the process.

In Australia, governments on all levels are facing fundamental challenges to address public health problems which include harm from gambling. Funding is very limited, and most of the resources are invested in combatting the most significant problems and to reduce the harm for the people who are on the far end of the problem gambling scale. Evidence from the four group program versions in this research, together with the volunteer study, are not sufficient to promote this model as a definite relapse prevention model. Nevertheless, the results and the learnings from this thesis are significant enough to inform the development of new relapse prevention interventions in relation to problem gambling. They also could be used to improve already existing interventions to prevent problem gambling relapse and to reduce the harm caused by gambling.

The findings indicate that programs addressing social isolation and exploring other activities to substitute in recovery for gambling are important but absent from traditional approaches. It is a possibility that a lack of consumer consultation in the process of developing new therapeutic interventions is responsible for this. There is growing recognition of the importance of *co-design* to improve business practices, in which consumers are also

engaged in the process of designing and implementing better service practices. In social services, however, even though their mission statements highlight their person-centred or people-centred approach, the involvement of consumers within the design and delivery of interventions is often more tokenistic than collaborative.

The model discussed in this thesis has been developed by the author and was based on her personal experience of problem gambling and recovery. It was developed and trialled pending evidence-based academic research. Once the model was developed, the author consulted with other key experts, including health professionals, on how to refine the model. At the end of each program version or study, the author involved health professionals, participants, volunteers, and key stakeholders in co-designing the next program. This was not done just to get their views on their own experience of the program but to involve them actively in shaping the next program in order to improve outcomes. The program as a whole was then subjected to evidence-based academic scrutiny in this thesis.

Using this approach to improve service delivery for consumers harmed by gambling would mean a transformation of the current service delivery system. It would mean that all of the services and professionals would engage with consumers to form genuine partnerships. This would not be just to improve how things are done but seriously to challenge the status quo on how best to produce the best outcomes. This thesis affirmed how important it is not only to invest more research and resources into *prevention and best practice therapeutic interventions* but also to focus on investing more research and resources into relapse prevention.

Focussing on social connectedness and leisure activities in a program to address problem gambling relapse provides a promising framework. The author hopes that this thesis will contribute to a transformation of our current system of care. Furthermore, the author hopes that it will inspire the service providers that are supporting people suffering from gambling related harm to move towards forming an innovative, inclusive, and collaborative community of professionals with experiential and educational knowledge to support those needing help because of problem gambling related harm.

References

- Aanes, M. M., Mittelmark, M. B., & Hetland, J. (2010). Interpersonal stress and poor health. *European Psychologist.* doi:<u>https://doi.org/10.1027/1016-9040/a000003</u>
- Abbott, M., Bellringer, M., Garrett, N., Hodgins, D., Du Preez, K. P., Landon, J., & Sullivan,
 S. (2013). *Effectiveness of problem gambling brief telephone interventions: An uncontrolled outcome study*.
- Abbott, M., Volberg, R., Bellringer, M., & Reith, G. (2004). A review of research on aspects of problem gambling. Retrieved from
- Abbott, M. W., & Volberg, R. A. (1999). Gambling and problem gambling in the community: An international overview and critique: Department of Internal Affairs Wellington.
- Abuse, S. (2005). Mental Health Services Administration: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs (TIP 43). Rockville, MD.
- Alexander, B. K., & Hadaway, P. F. (1982). Opiate addiction: The case for an adaptive orientation. *Psychological bulletin*, *92*(2), 367.
- American Psychiatric Association (APA). (2019). *What is Addiction?* Retrieved from: https://www.psychiatry.org/patients-families/addiction/what-is-addiction.
- Anderson, S., Dobbie, F., & Reith, G. (2009). *Recovery from problem gambling: a qualitative study*. Retrieved from Glasgow:
- Armstrong, A., & Carroll, M. (2017). Gambling activity in Australia.

Baidawi, A. (2018, Apr 4). Australians Are the World's Biggest Gambling Losers, and Some Seek Action. *New York Times*. Retrieved from:
https://www.nytimes.com/2018/04/04/world/australia/australians-gambling-betting-machines.html

- Bandura, A. (2010). Self-efficacy. The Corsini encyclopedia of psychology, 1-3
- Bellringer, P. (1999). Understanding problem gamblers: Free Association Books London.

- Bensimon, M., Amir, D., & Wolf, Y. (2008). Drumming through trauma: Music therapy with post-traumatic soldiers. *The Arts in Psychotherapy*, *35*(1), 34-48.
- Bergh, C., & Kühlhorn, E. (1994). Social, psychological and physical consequences of pathological gambling in Sweden. *Journal of Gambling Studies*, 10(3), 275-285. doi:10.1007/bf02104968
- Berk, L., & Tan, S. (1996). The laughter-immune connection. Humor and Health Journal, 5.
- Billi, R., Stone, C., Marden, P., & Yeung, K. (2014). The Victorian Gambling Study: A longitudinal study of gambling and health in Victoria, 2008–2012. Retrieved from
- Binde, P. (2012a). A mutual support group for young problem gamblers. *International Journal of Mental Health and Addiction*, 10(4), 524-536.
- Binde, P. (2012b). A Swedish mutual support society of problem gamblers. *International Journal of Mental Health and Addiction*, *10*(4), 512-523.
- Blaszczynski, A. (2001). Harm minimization strategies in gambling: An overview of international initiatives and interventions. *Melbourne: Australian Gaming Council*.
- Blaszczynski, A., Jackson, A., & Thomas, S. (2003). Measuring problem gambling:
 Evaluation of the Victorian Gambling Screen. Gambling Research Panel (GRP)
 Report No. 3.
- Blaszczynski, A., Ladouceur, R., & Shaffer, H. J. (2004). A science-based framework for responsible gambling: The Reno model. *Journal of Gambling Studies*, *20*(3), 301-317.
- Blaszczynski, A., & McConaghy, N. (1989). Anxiety and/or depression in the pathogenesis of addictive gambling. *International Journal of the Addictions*, *24*(4), 337-350.
- Blaszczynski, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction*, *97*(5), 487-499. doi:10.1046/j.1360-0443.2002.00015.x

Boisvert, R. A., Martin, L. M., Grosek, M., & Clarie, A. J. (2008). Effectiveness of a peer support community in addiction recovery: participation as intervention. *Occupational Therapy International*, 15(4), 205-220.

Books, G. (1994). Webster's engcyclopedic Unabridged dictionary of the english language.

- Botterill, E., Gill, P. R., McLaren, S., & Gomez, R. (2016). Marital status and problem gambling among Australian older adults: the mediating role of loneliness. *Journal of Gambling Studies*, *32*(3), 1027-1038.
- Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: a research note. *Qualitative research*, *8*(1), 137-152.
- Breen, H., Buultjens, J., & Hing, N. (2006). Implementing responsible gambling practices in a regional area. *Journal of Hospitality and Tourism Management*, *13*(1), 23-43.
- Breen, H., & Gainsbury, S. (2013). Aboriginal gambling and problem gambling: A review. *International Journal of Mental Health and Addiction*, 11(1), 75-96.
- Brewer, J. A., Grant, J. E., & Potenza, M. N. (2008). The treatment of pathologic gambling. Addictive Disorders & Their Treatment, 7(1), 1-13.
- Browne, M., Langham, E., Rawat, V., Greer, N., Li, E., Rose, J., . . . Goodwin, B. (2016). Assessing gambling related harm in Victoria: a public health perspective. Retrieved from
- Buckingham, S. A., Frings, D., & Albery, I. P. (2013). Group membership and social identity in addiction recovery. *Psychology of Addictive Behaviors*, *27*(4), 1132.
- Cabassa, L. J., Nicasio, A., & Whitley, R. (2013). Picturing recovery: A photovoice exploration of recovery dimensions among people with serious mental illness. *Psychiatric Services*, 64(9), 837-842.

- Cassidy, R., Loussouarn, C., & Pisac, A. (2013). Fair Game: Producing Gambling Research; The Goldsmith's Report. (Research Report). London: Goldsmith's University of London. Retrieved from: http://research.gold.ac.uk/11731/1/Fair-Game-Web-Final.pdf
- Chen, P., Jindani, F., Perry, J., & Turner, N. L. (2014). Mindfulness and problem gambling treatment. *Asian Journal of Gambling Issues and Public Health*, 4(1), 2.
- Clarke, D. (2006). Impulsivity as a mediator in the relationship between depression and problem gambling. *Personality and Individual Differences*, 40(1), 5-15. doi:10.1016/j.paid.2005.05.008
- Cohen, S. (2003). Psychosocial models of the role of social support in the etiology of physical disease.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American journal of sociology*, *94*, S95-S120.
- Collingridge, D. S. (2013). A primer on quantitized data analysis and permutation testing. Journal of Mixed Methods Research, 7(1), 81-97.
- Contole, J., Sundbery, J., & Weir, S. (2015). Peer Support For Problem Gambling. Retrieved from
- Coroner's Prevention Unit (2013). *Gambling-related suicides, Victoria 2000-2012*. (Report). Victoria: Coroners Court of Victoria. Retrieved from: https://www.coronerscourt.vic.gov.au/sites/default/files/2018-11/cpu%2Bdata%2Bsummary%2B-%2Bgambling%2Brelated%2Bsuicides%2B-%2B10%2Bsep%2B2013.pdf
- Corrigan, P. W., Powell, K. J., Fokuo, J. K., & Kosyluk, K. A. (2014). Does humor influence the stigma of mental illnesses? *The Journal of nervous and mental disease*, 202(5), 397.

Cowlishaw, S., Merkouris, S., Chapman, A., & Radermacher, H. (2014). Pathological and problem gambling in substance use treatment: A systematic review and meta-analysis. *Journal of Substance Abuse Treatment*, 46(2), 98-105.

Creswell, J. (2013). Inquiry & Research Design: Sage Publication: Thousand Oaks.

- Cuijpers, P., van Straten, A., & Warmerdam, L. (2007). Behavioral activation treatments of depression: A meta-analysis. *Clinical Psychology Review*, 27(3), 318-326.
 doi:10.1016/j.cpr.2006.11.001
- Currie, S. R., Miller, N., Hodgins, D. C., & Wang, J. (2009). Defining a threshold of harm from gambling for population health surveillance research. *International Gambling Studies*, 9(1), 19-38.
- Davidson, L., Rowe, M., Tondora, J., O'Connell, M. J., & Lawless, M. S. (2008). A practical guide to recovery-oriented practice: Tools for transforming mental health care:
 Oxford University Press.
- de Jong Giervald, J., & van Tilburg, T. G. (1999). *Manual of the loneliness scale*. Retrieved from Amsterdam:
- de Jong, J., & van Tilburg, T. G. (1999). Manual of the loneliness scale (D.o.S.R. Methodology, Trans.). Amsterdam: University of Amsterdam.
- de Oliveira, M. P. M. T., da Silveira, D. X., de Carvalho, S. V. B., Collakis, S. T., Bizeto, J., & Silva, M. T. A. (2009). Reliability, validity and classification accuracy of the South Oaks Gambling Screen in a Brazilian sample. *Journal of Gambling Studies, 25*(4), 557-568.
- Delfabbro, P., Derevensky, J. L., Gainsbury, S., Grant, J. E., Griffiths, M. D., Gupta, R., . . . Shead, N. W. (2011). *Youth gambling: The hidden addiction*: Walter de Gruyter.

- Delfabbro, P., King, D., & Griffiths, M. D. (2014). From adolescent to adult gambling: An analysis of longitudinal gambling patterns in South Australia. *Journal of Gambling Studies*, *30*(3), 547-563.
- Delfabbro, P. H. (1992). Australasian gambling review (1992-2011)[electronic (Vol. 2011).
- Department of Justice. (2011). Socioeconomic impacts of access to electronic gaming machines in Victoria: Effects on demand and communities. Victoria.
- Dickson-Gillespie, L., Rugle, L., Rosenthal, R., & Fong, T. (2008). Preventing the incidence and harm of gambling problems. *The Journal of Primary Prevention*, 29(1), 37-55.
- Dickson, L. M., Derevensky, J. L., & Gupta, R. (2004). Harm reduction for the prevention of youth gambling problems: Lessons learned from adolescent high-risk behavior prevention programs. *Journal of Adolescent Research*, 19(2), 233-263.
- Dingle, G. A., Cruwys, T., & Frings, D. (2015). Social identities as pathways into and out of addiction. *Frontiers in psychology*, *6*, 1795.
- Doughney, J. (2007). Lies, damned lies and 'problem gambling'prevalence rates: The example of Victoria, Australia. *Journal of Business Systems, Governance and Ethics,* 2(1), 41-54.
- Doughney, J., & Kelleher, T. (1999). *The impact of poker machine gambling on low-income municipalities*: Victoria University of Technology.
- Dowling, N., Jackson, A. C., & Thomas, S. A. (2008). Behavioural interventions in the treatment of pathological gambling: A reveiw of activity scheduling and desensitisation. *International Journal of Behavioural Consultation and Therapy*, 4(2), 172-187.
- Dowling, N., Jackson, A. C., Thomas, S. A., & Frydenberg, E. (2010). Children at risk of developing problem gambling. *Melbourne: Gambling Research Australia*.

- Dowling, N., Smith, D., & Thomas, T. (2005). Electronic gaming machines: are they the 'crack - cocaine'of gambling? *Addiction*, *100*(1), 33-45.
- Dowling, N. A., Cowlishaw, S., Jackson, A. C., Merkouris, S. S., Francis, K. L., & Christensen, D. R. (2015). Prevalence of psychiatric comorbidity in treatment-seeking problem gamblers: A systematic review and meta-analysis. *Australian & New Zealand Journal of Psychiatry*, 49(6), 519-539.
- Dowling, N. A., Rodda, S. N., Lubman, D. I., & Jackson, A. C. (2014). The impacts of problem gambling on concerned significant others accessing web-based counselling. *Addictive behaviors*, 39(8), 1253-1257.
- E. Miller, H., & L. Thomas, S. (2018). The problem with 'responsible gambling': impact of government and industry discourses on feelings of felt and enacted stigma in people who experience problems with gambling. *Addiction Research & Theory, 26*(2), 85-94.
- Egan, G. (2013). The skilled helper: A problem-management and opportunity-development approach to helping: Cengage Learning.
- Evans, L., & Delfabbro, P. H. (2005). Motivators for change and barriers to help-seeking in Australian problem gamblers. *Journal of Gambling Studies, 21*(2), 133-155.
- Ferentzy, P., & Skinner, W. (2003). Gamblers Anonymous: A critical review of the literature. *eGambling: the electronic journal of gambling issues*(9 Oct), 1-29.
- Ferentzy, P., Skinner, W., & Antze, P. (2006). Recovery in gamblers anonymous. *Journal of Gambling Issues*, 17, 1-18.
- Ferris, J., & Wynne, H. (2001). The Canadian problem gambling index. *Ottawa, ON: Canadian Centre on Substance Abuse*.
- Ferris, J., & Wynne, H. J. (2001). *The Canadian Problem Gambling Index*. Retrieved from Ottawa:

- Forbes, F., Battersby, M., Baigent, M., Pols, R., Harvey, P., Oakes, J., & Edmonds, C. (2010). *Naltrexone feasibility, acceptability and preliminary effectiveness study*: Independent Gambling Authority South Australia.
- Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. *Psychological Medicine*, 33(2), 357-362. doi:Doi 10.1017/S0033291702006700
- Gaboury, A., & Ladouceur, R. (1989). Erroneous perceptions and gambling. *Journal of Social Behavior and Personality, 4*(4), 411.
- Gainsbury, S., Hing, N., & Suhonen, N. (2014). Professional help-seeking for gambling problems: Awareness, barriers and motivators for treatment. *Journal of Gambling Studies*, 30(2), 503-519.
- Gainsbury, S. M. (2014). Review of self-exclusion from gambling venues as an intervention for problem gambling. *Journal of Gambling Studies*, *30*(2), 229-251.
- Ge, L., Yap, C. W., Ong, R., & Heng, B. H. (2017). Social isolation, loneliness and their relationships with depressive symptoms: A population-based study. *PloS one*, 12(8), e0182145.
- Gitterman, A., & Salmon, R. (Eds.). (2009). Encyclopedia of social work with groups. Routledge.
- Gitterman, A., & Schulman, L. (Eds.). (2005). *Mutual aid groups, vulnerable and resilient populations, and the life cycle*. Columbia University Press.
- Goodwin, B. C., Browne, M., Rockloff, M., & Rose, J. (2017). A typical problem gambler affects six others. *International Gambling Studies*, *17*(2), 276-289.

- Goudriaan, A. E., Oosterlaan, J., de Beurs, E., & Van den Brink, W. (2004). Pathological gambling: a comprehensive review of biobehavioral findings. *Neuroscience & Biobehavioral Reviews*, 28(2), 123-141.
- Gray, K. L., Browne, M. A. O., & Prabhu, V. R. (2007). Systematic review and meta-analysis of studies on early intervention and prevention for problem gambling: Department of Justice.
- Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance use, 10*(4), 191-197.
- Griffiths, M., & Delfabbro, P. (2001). The biopsychosocial approach to gambling: Contextual factors in research and clinical interventions. *Journal of Gambling Issues*.
- Hall, G. W., Carriero, N. J., Takushi, R. Y., Montoya, I. D., Preston, K. L., & Gorelick, D. A. (2000). Pathological gambling among cocaine-dependent outpatients. *American journal of Psychiatry*, 157(7), 1127-1133.
- Hare, S. (2009). A study of gambling in Victoria: Problem gambling from a public health perspective. *Melbourne: Department of Justice*.
- Hare, S. (2015). Study of gambling and health in Victoria. Victorian Responsible Gambling foundation: North Melbourne, Vic., Australia) Available at <u>https://www</u>.
 responsiblegambling. vic. gov. au/about-us/what-we-do/foundation-research-program/research-programs-and-activities/study-of-gambling-and-health-in-victoria [Verified 8 February 2017].
- Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Annals of behavioral medicine*, 40(2), 218-227.

Heather, N. (1989). Psychology and brief interventions. Addiction, 84(4), 357-370.

- Heisler, M. (2007). Overview of peer support models to improve diabetes self-management and clinical outcomes. *Diabetes Spectrum*, 20(4), 214-221.
- Heyman, G. M. (2013). Quitting drugs: quantitative and qualitative features. *Annual Review* of Clinical Psychology, 9, 29-59.
- Hing, N., Nuske, E., & Breen, H. (2017). A review of research into problem gambling among Australian women. Gambling Disorders in Women: An International Female Perspective on Treatment and Research, 235.
- Hing, N., Nuske, E., & Gainsbury, S. (2012). Gamblers at-risk and their help-seeking behaviour. *Melbourne: Gambling Research Australia*.
- Hing, N., Tiyce, M., Holdsworth, L., & Nuske, E. (2013). All in the family: help-seeking by significant others of problem gamblers. *International Journal of Mental Health and Addiction*, 11(3), 396-408.
- Hodgins, D. C., Currie, S. R., Currie, G., & Fick, G. H. (2009). Randomized trial of brief motivational treatments for pathological gamblers: More is not necessarily better. *Journal of Consulting and Clinical Psychology*, 77(5), 950.
- Hodgins, D. C., Currie, S. R., & el-Guebaly, N. (2001). Motivational enhancement and selfhelp treatments for problem gambling. *Journal of Consulting and Clinical Psychology*, 69(1), 50.
- Hodgins, D. C., Currie, S. R., el-Guebaly, N., & Diskin, K. M. (2007). Does Providing
 Extended Relapse Prevention Bibliotherapy to Problem Gamblers Improve Outcome? *Journal of Gambling Studies*, 23(1), 41-54. doi:10.1007/s10899-006-9045-1
- Hodgins, D. C., & El-Guebaly, N. (2000). Natural and treatment-assisted recovery from gambling problems: a comparison of resolved and active gamblers. *Addiction*, 95(5), 777-789. doi:10.1046/j.1360-0443.2000.95577713.x

- Hodgins, D. C., & el-Guebaly, N. (2004). Retrospective and Prospective Reports of
 Precipitants to Relapse in Pathological Gambling. *Journal of Consulting and Clinical Psychology*, 72(1), 72-80. doi:10.1037/0022-006x.72.1.72
- Hodgins, D. C., Stea, J. N., & Grant, J. E. (2011). Gambling disorders. *The Lancet,* 378(9806), 1874-1884.
- Hoey, L. M., Ieropoli, S. C., White, V. M., & Jefford, M. (2008). Systematic review of peer support programs for people with cancer. *Patient education and counseling*, 70(3), 315-337.
- Holdsworth, L., Nuske, E., & Breen, H. (2012). Only the lonely: an analysis of women's experiences of poker machine gambling. *Gambling Research: Journal of the National Association for Gambling Studies (Australia), 23*(2), 17.
- Holdsworth, L., Nuske, E., & Hing, N. (2015). A grounded theory of the influence of significant life events, psychological comorbidities and related social factors on gambling involvement. *International Journal of Mental Health and Addiction, 13*(2), 257-273.
- Hollander, E., Pallanti, S., Allen, A., Sood, E., & Rossi, N. B. (2005). Does sustained-release lithium reduce impulsive gambling and affective instability versus placebo in pathological gamblers with bipolar spectrum disorders? *American journal of Psychiatry*, 162(1), 137-145.
- Holt-Lunstad, J. (2017). The potential public health relevance of social isolation and loneliness: Prevalence, epidemiology, and risk factors. *Public Policy & Aging Report*, 27(4), 127-130.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227-237.

- Holub, A., Hodgins, D. C., & Peden, N. E. (2005). Development of the temptations for gambling questionnaire: A measure of temptation in recently quit gamblers. *Addiction Research & Theory*, 13(2), 179-191. doi:Doi 10.1080/16066350412331314902
- Hopko, D. R., Lejuez, C. W., Lepage, J. P., Hopko, S. D., & McNeil, D. W. (2003). A Brief
 Behavioral Activation Treatment for Depression. *Behavior Modification*, 27(4), 458469. doi:10.1177/0145445503255489
- House, R. (1989). Webster's encyclopedic unabridged dictionary of the English language. New York.
- Jackson, A., Thomas, S., Thomason, N., Holt, T., & McCormack, J. (2000). Analysis of clients presenting to break even problem gambling services, July 1 1998 to June 20 1999. *Melbourne, Victoria: Victorian Department of Human Services*.
- Jackson, A. C., Christensen, D.R., Francis, K.L., Umemoto, A., & Vasiliadas, S; Melbourne:,
 & Problem Gambling Research and Treatment Centre, U. o. M. (2011). *The Victorian Problem Gambling Innovations Grants Program: Consolidated Evaluation Report*. Retrieved from
- Jackson, A. C., Francis, K. L., Byrne, G., & Christensen, D. R. (2012). Leisure Substitution and Problem Gambling: Report of a Proof of Concept Group Intervention. *International Journal of Mental Health and Addiction*, 1-11. doi:10.1007/s11469-012-9399-9
- Jackson, A. C., Thomas, S. A., Holt, T. A., & Thomason, N. (2005). Change and continuity in a help-seeking problem gambling population: A five-year record. *Journal of Gambling Issues*(13).
- Jackson, A. C., Thomason, N., & Ryan, V. (1997). Analysis of clients presenting to problem gambling services from July 1, 1995 to June 30, 1996: School of Social Work, University of Melbourne.

- Jackson, A. C., Wynne, H., Dowling, N. A., Tomnay, J. E., & Thomas, S. A. (2010). Using the CPGI to determine problem gambling prevalence in Australia: Measurement issues. *International Journal of Mental Health and Addiction*, 8(4), 570-582.
- Jacobs, D. F. (1986). A general theory of addictions: A new theoretical model. *Journal of Gambling Behavior*, *2*(1), 15-31.
- Jones, N., Twardzicki, M., Ryan, J., Jackson, T., Fertout, M., Henderson, C., & Greenberg, N. (2014). Modifying attitudes to mental health using comedy as a delivery medium. *Social psychiatry and psychiatric epidemiology*, *49*(10), 1667-1676.
- Karelina, K., & DeVries, A. C. (2011). Modeling social influences on human health. *Psychosomatic medicine*, *73*(1), 67.
- Kellogg, S. (1993). Identity and recovery. Psychotherapy: Theory, Research, Practice, Training, 30(2), 235.
- King, D. L., & Delfabbro, P. H. (2014). The cognitive psychology of Internet gaming disorder. *Clinical Psychology Review*, 34(4), 298-308.
- Korn, D. A., & Shaffer, H. J. (1999). Gambling and the health of the public: Adopting a public health perspective. *Journal of Gambling Studies*, 15(4), 289-365.
- Korn, D. A., & Shaffer, H. J. (2004). Practice guidelines for treating gambling related problems. An Evidence-Based Treatment Guide for Clinicians. Toronto: Massachusetts Council on Compulsive Gambling.
- Koski-Jannes, A. (2002). Social and personal identity projects in the recovery from addictive behaviours. *Addiction Research and Theory*, *10*(2), 183-202.

Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American journal of occupational therapy*, 45(3), 214-222.

- Ladd, G. T., Molina, C. A., Kerins, G. J., & Petry, N. M. (2003). Gambling participation and problems among older adults. *Journal of Geriatric Psychiatry and Neurology*, 16(3), 172-177.
- Ladouceur, R., Sylvain, C., Boutin, C., Lachance, S., Doucet, C., & Leblond, J. (2003). Group therapy for pathological gamblers: A cognitive approach. *Behaviour Research* and Therapy, 41(5), 587-596.
- Ladouceur, R., Sylvain, C., & Gosselin, P. (2007). Self-exclusion program: A longitudinal evaluation study. *Journal of Gambling Studies*, *23*(1), 85-94.
- Ladouceur, R., Sylvain, C., Sévigny, S., Poirier, L., Brisson, L., Dias, C., . . . Pilote, P. (2006).
 Pathological gamblers: Inpatients' versus outpatients' characteristics. *Journal of Gambling Studies*, 22(4), 443-450.
- Langdridge, D. (2007). Phenomenological psychology: Theory, research and method: Pearson Education.
- Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2015).Understanding gambling related harm: A proposed definition, conceptual framework, and taxonomy of harms. *BMC public health*, *16*(1), 80.
- Ledgerwood, D. M., & Petry, N. M. (2006). Posttraumatic stress disorder symptoms in treatment - seeking pathological gamblers. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies, 19*(3), 411-416.
- Lejuez, C. W., Hopko, D. R., & Hopko, S. D. (2001). A brief behavioral activation treatment for depression treatment manual. *Behavior Modification*, *25*(2), 255-286.
- Lesieur, H. R., & Blume, S. B. (1987). The South Oaks Gambling Screen (SOGS): A new instrument for the identification of pathological gamblers. *American journal of Psychiatry*, 144(9).

- Lesieur, H. R., & Rosenthal, R. J. (1991). Pathological gambling: A review of the literature (prepared for the American Psychiatric Association task force on DSM-IV committee on disorders of impulse control not elsewhere classified). *Journal of Gambling Studies*, 7(1), 5-39.
- Lin, N. (1999). Building a network theory of social capital Connections, 22 (1), 28–51. *Google Scholar*.
- Livingstone, C. (2005). Desire and the consumption of danger: Electronic gaming machines and the commodification of interiority. *Addiction Research & Theory, 13*(6), 523-534.
- Livingstone, C., & Woolley, R. (2007). Risky business: A few provocations on the regulation of electronic gaming machines. *International Gambling Studies*, *7*(3), 361-376.
- Lloret, D., Montesinos, R., & Capafons, A. (2014). Waking self-hypnosis efficacy in cognitive behavioral treatment for pathological gambling: An effectiveness clinical assay. *International Journal of Clinical and Experimental Hypnosis*, 62(1), 50-69.
- Lorains, F. K., Cowlishaw, S., & Thomas, S. A. (2011). Prevalence of comorbid disorders in problem and pathological gambling: Systematic review and meta - analysis of population surveys. *Addiction*, 106(3), 490-498.
- Luks, A. (1988). Helper's high. Psychology Today, 22, 39-39.
- Lund, I. (2009). Gambling behaviour and the prevalence of gambling problems in adult EGM gamblers when EGMs are banned. A natural experiment. *Journal of Gambling Studies*, *25*(2), 215-225.
- Maccallum, F., & Blaszczynski, A. (2003). Pathological gambling and suicidality: An analysis of severity and lethality. *Suicide and life-threatening behavior*, *33*(1), 88-98.
- Magura, S., Laudet, A. B., Mahmood, D., Rosenblum, A., & Knight, E. (2002). Adherence to medication regimens and participation in dual-focus self-help groups. *Psychiatric Services*, 53(3), 310-316.

Marks, I. M. (1986). Behavioral Psychotherapy. Bristol: John Wright.

Marlatt, G. A., Baer, J. S., Donovan, D. M., & Kivlahan, D. R. (1988). Addictive behaviors: Etiology and treatment. *Annual review of Psychology*, *39*(1), 223-252.

Marshall, C., & Rossman, G. B. (2014). Designing qualitative research: Sage publications.

- Marshall, D. C., & Baker, R. G. (2002). The evolving market structures of gambling: Case studies modelling the socioeconomic assignment of gaming machines in Melbourne and Sydney, Australia. *Journal of Gambling Studies*, 18(3), 273-291.
- Martin, R. A. (2001). Humor, laughter, and physical health: methodological issues and research findings. *Psychological bulletin*, *127*(4), 504.
- Maschi, T., & Bradley, C. (2010). Recreational drumming: A creative arts intervention strategy for social work teaching and practice. *Journal of Baccalaureate Social Work*, 15(1), 53-66.
- McConaghy, N., Blaszczynski, A., & Frankova, A. (1991). Comparison of Imaginal Desensitisation with other Behavioural Treatments of Pathological Gambling a Twoto Nine-Year Follow-up. *The British Journal of Psychiatry*, 159(3), 390-393.
- McCormick, R. A., Taber, J., Kruedelbach, N., & Russo, A. (1987). Personality profiles of hospitalized pathological gamblers: The California Personality Inventory. *Journal of Clinical Psychology*, 43(5), 521-527.
- McCown, W. G., & Chamberlain, L. L. (2000). Best possible odds: Contemporary treatment strategies for gambling disorders: Wiley, New York.
- McElroy, S. L., Hudson, J. I., Phillips, K. A., Keck Jr, P. E., & Pope Jr, H. G. (1993). Clinical and theoretical implications of a possible link between obsessive-compulsive and impulse control disorders. *Depression*, *1*(3), 121-132.
- McMillen, J., Jackson, A., Johnson, D., O'Hara, J., Woolley, R., & Woolley, R. (1999).Australian gambling: Comparative history and analysis. *Victorian Casino and Gaming Authority*.
- McMillen, J., Marshall, D., Ahmed, E., & Wenzel, M. (2004). 2003 Victorian longitudinal community attitudes survey: Gambling Research Panel, Melbourne.
- McMillen, J., & Pitt, S. (2005). *Review of the ACT Government's harm minimisation measures*: Centre for Gambling Research, ANU.
- McMillen, J., & Wenzel, M. (2006). Measuring problem gambling: Assessment of three prevalence screens. *International Gambling Studies*, *6*(2), 147-174.
- McQuade, A., & Gill, P. (2012). The role of loneliness and self-control in predicting problem gambling behaviour. *Gambling Research: Journal of the National Association for Gambling Studies (Australia), 24*(1), 18.
- Merriam, S. B. (2002). Introduction to qualitative research. *Qualitative research in practice: Examples for discussion and analysis*, *1*(1), 1-17.
- Messerlian, C., Derevensky, J., & Gupta, R. (2005). Youth gambling problems: A public health perspective. *Health promotion international*, *20*(1), 69-79.
- Morasco, B. J., Weinstock, J., Ledgerwood, D. M., & Petry, N. M. (2007). Psychological Factors that Promote and Inhibit Pathological Gambling. *Cognitive and Behavioral Practice*, 14(2), 208-217. doi:10.1016/j.cbpra.2006.02.005
- Mundt, J. C., Marks, I. M., Shear, M. K., & Greist, J. H. (2002). The Work and Social Adjustment Scale: a simple measure of impairment in functioning. *British Journal of Psychiatry*, 180, 461-464.
- Neal, P. N., Delfabbro, P. H., & O'Neil, M. G. (2005). Problem gambling and harm: Towards a national definition. 125.

- Nower, L., & Blaszczynski, A. (2008). Recovery in pathological gambling: An imprecise concept. *Substance use & misuse, 43*(12-13), 1844-1864.
- O'Neil, M., Whetton, S., Dolman, B., Herbert, M., Giannopolous, V., O'Neil, D., & Wordley,
 J. (2003). Part A—Evaluation of self-exclusion programs in Victoria and Part B—
 Summary of self-exclusion programs in Australian States and Territories. *Melbourne: Gambling Research Panel*.
- Oakes, J., Pols, R., Battersby, M., Lawn, S., Pulvirenti, M., & Smith, D. (2012). A focus group study of predictors of relapse in electronic gaming machine problem gambling, part 1: Factors that 'push'towards relapse. *Journal of Gambling Studies, 28*(3), 451-464.
- Oakes, J., Smout, M., Smith, D., Battersby, M., Pols, R., & McLaghlin, K. (2010). *The definition and predictors of relapse in problem gambling*. Retrieved from Melbourne:
- Oei, T. P., & Gordon, L. M. (2008). Psychosocial factors related to gambling abstinence and relapse in members of gamblers anonymous. *Journal of Gambling Studies*, 24(1), 91-105.
- Office of Gaming and Racing. (2009). *Taking Action on Problem Gambling: Evaluation Framework*. Retrieved from Melbourne:
- Oldenburg, R. (1999, 2001). The Great Good Place Celebrating the Third Place.
- Pallant, J. (2007). SPSS Survival Manual. 5th edn. Sydney: Allen & Unwin.
- Pentland, J., & Drosten, P. (1996). Financial counselling and problem gambling counselling: exploration of a service model. *Australian Journal of Primary Health*, *2*(2), 54-62.
- Petry, N. M. (2004). *Recovery without professional interventions*. Washington DC;: American Psychological Association.
- Petry, N. M. (2005a). Gamblers anonymous and cognitive behavioral therapies for pathological gamblers. *Journal of Gambling Studies*, *21*(1), 27-33.

- Petry, N. M. (2005b). Recovery without professional interventions. Pathological gambling: Etiology, comorbidity, and treatment] Washington, DC US: American Psychological Association, 153-173.
- Petry, N. M., Stinson, F. S., & Grant, B. F. (2005). Comorbidity of DSM-IV pathological gambling and other psychiatric disorders: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *The Journal of clinical psychiatry*.
- Petry, N. M., Weinstock, J., Ledgerwood, D. M., & Morasco, B. (2008). A randomized trial of brief interventions for problem and pathological gamblers. *Journal of Consulting and Clinical Psychology*, 76(2), 318.
- Pickernell, D. G., Keast, R. L., & Brown, K. A. (2010). Social clubs and social capital: The effect of electronic gaming machines in disadvantaged regions on the creation or destruction of community resilience.
- Pillemer, K., Landreneau, L. T., & Suitor, J. J. (1996). Volunteers in a peer support project for caregivers: what motivates them? *American Journal of Alzheimer's Disease*, 11(5), 13-19.
- Problem Gambling Research and Treatment Centre. (2011). Assessment and Treatment Guidelines in Problem and Pathological Gambling. Retrieved from <u>http://www.nhmrc.gov.au/guidelines/publications/ext0005</u> website:
- Prochaska, J., & DiClemente, C. (1983). Stages and Processes of Self-Change of Smoking: Toward and Integrative Model of Change. . J Consult Clin Psych.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American psychologist*, *47*(9), 1102.
- Productivity Commission. (1999). Australia's gambling industries: Inquiry report. Retrieved from

- Productivity Commission. (2010). *Gambling*. Productivity commission inquiry report. Canberra: Commonwealth of Australia.
- Productivity Commission (2019). *Report on Government Services*. Canberra: Commonwealth of Australia. Retrieved from: https://www.pc.gov.au/research/ongoing/report-on-government-services

Provine, R. R. (1996). Laughter. American scientist, 84(1), 38-45.

Putnam, R. D. (2001). Bowling alone: Simon and Schuster.

- Quigley, L., Yakovenko, I., Hodgins, D. C., Dobson, K. S., el-Guebaly, N., Casey, D. M., . . . Schopflocher, D. P. (2015). Comorbid problem gambling and major depression in a community sample. *Journal of Gambling Studies*, *31*(4), 1135-1152.
- Rash, C. J., & Petry, N. M. (2014). Psychological treatments for gambling disorder. Psychology research and behavior management, 7, 285.
- Reith, G., & Dobbie, F. (2012). Lost in the game: Narratives of addiction and identity in recovery from problem gambling. *Addiction Research & Theory, 20*(6), 511-521.
- Rickwood, D., Blaszczynski, A., Delfabbro, P., Dowling, N., & Heading, K. (2010). The psychology of gambling. *InPsych*, *32*(6), 11-21.
- Riessman, F. (1965). The" helper" therapy principle. Social work, 27-32.
- Rintoul, A., & Deblaquiere, J. (2019). *Gambling in Suburban Australia*. (Research Report). Melbourne: Australian Institute of Family Studies.
- Rintoul, A. C., Livingstone, C., Mellor, A. P., & Jolley, D. (2013). Modelling vulnerability to gambling related harm: How disadvantage predicts gambling losses. *Addiction Research & Theory, 21*(4), 329-338.
- Rodda, S., & Cowie, M. (2005). Evaluation of electronic gaming machine harm minimisation in Victoria. *Report prepared for the Victorian Department of Justice, Melbourne, Caraniche Pty. Ltd.*

- Rodda, S., Lubman, D., & Dowling, N. (2017). Online support needs and experiences of family members affected by problem gambling.
- Rosecrance, J. (1985). Compulsive gambling and the medicalization of deviance. *Social problems*, *32*(3), 275-284.

Rosenthal, R. J. (1992). Pathological gambling. Psychiatric annals, 22(2), 72-78.

- Russell, A. M., Langham, E., & Hing, N. (2018). Social influences normalize gambling related harm among higher risk gamblers. *Journal of Behavioral Addictions*, 7(4), 1100-1111.
- Saleebey, D. (2002). The Strengths Perspective in Social V lork.
- Saugeres, L., Thomas, A., & Moore, S. (2014). 'It wasn't a very encouraging environment': influence of early family experiences on problem and at-risk gamblers in Victoria, Australia. *International Gambling Studies*, 14(1), 132-145.
- Schüll, N. D. (2012). Addiction by design: Machine gambling in Las Vegas: Princeton University Press.
- Schwarzer, R., & Jerusalem, M. (1995). General Self-Efficacy Scale. In J. Weinmann, S.
 Wright, & M. Johnston (Eds.), *Measures in Health Psychology: A User's Portfolio, Causal and Control Beliefs*. Windsor: NFER-NELSON.
- Schwarzer, R., & Jerusalem, M. (1995). Optimistic self-beliefs as a resource factor in coping with stress *Extreme stress and communities: Impact and intervention* (pp. 159-177): Springer.
- Sharpe, L. (2002). A reformulated cognitive–behavioral model of problem gambling: A biopsychosocial perspective. *Clinical Psychology Review*, 22(1), 1-25.
- Shakespeare, T., & Whieldon, A. (2018). Sing Your Heart Out: community singing as part of mental health recovery. *Medical humanities*, 44(3), 153-157.

- Shaver, P. R., & Brennan, K. A. (1991). Measures of depression. *Measures of personality and social psychological attitudes*, *1*, 195-289.
- Shonin, E., Van Gordon, W., & Griffiths, M. D. (2013). Buddhist philosophy for the treatment of problem gambling: Akadémiai Kiadó, co-published with Springer Science+ Business Media BV, Formerly Kluwer Academic Publishers BV.
- Simmons, R., Unwin, N., & Griffin, S. (2010). International Diabetes Federation: An update of the evidence concerning the prevention of type 2 diabetes. *Diabetes research and clinical practice*, *87*(2), 143-149.
- Slutske, W. S. (2006). Natural recovery and treatment-seeking in pathological gambling: Results of two US national surveys. *American journal of Psychiatry*, *163*(2), 297-302.
- Smith, J. (2000). Gambling taxation: Public equity in the gambling business. *Australian Economic Review*, 33(2), 120-144.
- Smith, S. A. J., A.C. (2008). Evaluation of Gambler's Help Northern Peer Connection Program Pilot 2. Retrieved from Melbourne:
- Solomon, P. (2004). Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric rehabilitation journal*, *27*(4), 392.
- Southwell, J., Boreham, P., & Laffan, W. (2008). Problem gambling and the circumstances facing older people. *Journal of Gambling Studies*, *24*(2), 151-174.
- Spence, K. W. (1956). Behavior theory and conditioning (Vol. 35). New Haven: yale university Press.
- Stewart, R. M., & Brown, R. I. (1988). An outcome study of Gamblers Anonymous. The British Journal of Psychiatry, 152(2), 284-288.
- Stinchfield, R. (2002). Reliability, validity, and classification accuracy of the South Oaks Gambling Screen (SOGS). *Addictive behaviors*, *27*(1), 1-19.

- Stinchfield, R., Winters, K. C., Botzet, A., Jerstad, S., & Breyer, J. (2007). Development and Psychometric Evaluation of the Gambling Treatment Outcome Monitoring System (GAMTOMS). *Psychology of Addictive Behaviors*, 21(2), 174-184. doi:Doi 10.1037/0893-164x.21.2.174
- Suurvali, H., Cordingley, J., Hodgins, D. C., & Cunningham, J. (2009). Barriers to seeking help for gambling problems: A review of the empirical literature. *Journal of Gambling Studies*, 25(3), 407-424.

Symond, P. (2003). How to stop gambling: Random House Australia.

- Tavares, H., Zilberman ML, & el-Guebaly, N. (2003). Are there cognitive and behavioural approaches specific to the treatment of pathological gambling? *Can J Psychiat*, 48(1), 22-27.
- "The World's Biggest Gamblers: Australia was the first country to deregulate gambling, and it shows". (2017, Feb 7). The Economist. Retrieved from: https://www.economist.com/graphic-detail/2017/02/09/the-worlds-biggest-gamblers
- Thomas, A., Pfeifer, J., Moore, S., Meyer, D., Yap, L., & Armstrong, A. (2013). Evaluation of the removal of ATMs from gaming venues in Victoria, Australia. *Evaluation*.
- Thomas, S. (2014). Problem gambling. Australian family physician, 43(6), 362.
- Thomas, S., Jackson, A., & Blaszczynski, A. (2003). Measuring problem gambling:
 Evaluation of the Victorian gambling screen. *Report for the Gambling Research Panel* (GRP Report No. 4).
- Thomas, S., Pitt, H., Bestman, A., Randle, M., McCarthy, S., & Daube, M. (2018). The determinants of gambling normalisation: Causes, consequences and public health responses. *Victoria: Victorian Responsible Gambling Foundation*.

- Thomas, S. L., Lewis, S., Westberg, K., & Derevensky, J. L. (2013). What influences the beliefs, behaviours and consumption patterns of 'moderate risk'gamblers? *International Journal of Mental Health and Addiction*, 11(4), 474-489.
- Thomas, A., Christensen, D., Deblaquiere, J., Armstrong, A., Moore, S., Carson, R., & Rintoul, A. (2016). *Review of electronic gaming machine pre-commitment features: Limit setting*. Australian Institute of Family Studies (AIFS).
- Tira, C., Jackson, A. C., & Tomnay, J. E. (2013). Pathways to late-life problematic gambling in seniors: a grounded theory approach. *The Gerontologist*, *54*(6), 1035-1048.
- Trevorrow, K., & Moore, S. (1998). The association between loneliness, social isolation and women's electronic gaming machine gambling. *Journal of Gambling Studies*, 14(3), 263-284.
- Tuffin, A., & Parr, V. (2008). Evaluation of the 6-hour shutdown of electronic gaming machines in NSW. Report prepared for the NSW Office of Liquor, Gaming and Racing by Bluemoon Research. Google Scholar.
- Valleur, M., Codina, I., Vénisse, J.-L., Romo, L., Magalon, D., Fatséas, M., . . . Groupe, J. (2016). Towards a validation of the three pathways model of pathological gambling. *Journal of Gambling Studies*, 32(2), 757-771.
- van der Maas, M. (2016). The social side of the pathways model: Examining the mediation of social support on the relationship between psychopathology and problem gambling. *Journal of Gambling Issues*(32), 11-27.
- Vasiliadis, S. D., Jackson, A. C., Christensen, D., & Francis, K. (2013). Physical accessibility of gaming opportunity and its relationship to gaming involvement and problem gambling: A systematic review. *Journal of Gambling Issues*(28), 1-46.

- Vasiliadis, S., & Thomas, A. (2018). Recovery agency and informal recovery pathways from gambling problems. *International journal of mental health and addiction*, 16(4), 874-887.
- Victorian Commission for Gambling and Liquor Regulation (2019). Gaming expenditure by local area. Victoria: State Government of Victoria. Retrieved from: https://www.vcglr.vic.gov.au/resources/data-and-research/gambling-data/gamingexpenditure-local-area
- Walker, M. B. (1992). The psychology of gambling: Pergamon Press.
- Walters, G. (1994). The gambling lifestyle: I. theory. *Journal of Gambling Studies*, 10(2), 159-182. doi:10.1007/bf02109938
- Wang, C. C. (1999). Photovoice: A participatory action research strategy applied to women's health. *Journal of women's health*, 8(2), 185-192.
- Westphal, J. R. (2007). Are the effects of gambling treatment overestimated? *International Journal of Mental Health and Addiction*, *5*(1), 65-79.
- Westphal, J. R. (2008). How well are we helping problem gamblers? An update to the evidence base supporting problem gambling treatment. *International Journal of Mental Health and Addiction*, 6(2), 249-264.
- White, W. L. (2009). Peer-Based Addiction Recovery Support: History, Theory, Practice, and Scientific Evaluation Executive Summary (Vol. 10): Counselor.
- Williams, R. J., Volberg, R. A., & Stevens, R. M. (2012). The population prevalence of problem gambling: Methodological influences, standardized rates, jurisdictional differences, and worldwide trends. Retrieved from
- Wood, R. T. A., & Griffiths, M. D. (2007). A qualitative investigation of problem gambling as an escape-based coping strategy. *Psychology and Psychotherapy: Theory, Research and Practice*, 80(1), 107-125. doi:10.1348/147608306x107881

Ziolkowski, S. (2014). World count of gaming machines 2013. Gaming Technologies

Association, 8.

Appendix A

Local Government Areas for Programs

Table A1.

Problem Gambling Severity Index Rates by Region (%)

	Non- gamblers	Non- problem gamblers	Low-risk gamblers	Moderate- risk gamblers	Problem gamblers
Barwon S/W	20.4	72.3	5.1	1.8	0.4
Grampians	20.1	70.8	5.6	3.4	0.1
Loddon Mallee	18.8	72.0	6.1	2.3	0.8
Hume	18.5	73.8	5.5	1.9	0.4
Gippsland	21.6	70.9	5.2	1.8	0.5
Eastern Metro	31.7	61.9	4.4	1.8	0.3
North & West Metro	29.2	60.2	6.8	2.7	1.2
Southern Metro	28.0	63.0	5.6	2.6	0.8

Note. Rates are from 2008 but are assumed to be unchanged and representative of 2010-11 rates. Source: Commission analysis from data provided by the VCGLR, DOJ 2009b, 58.

Table A2.

Regional and Metro Area Indicators with Relative Rankings in Parenthesis (2010-11)

	Problem gamblers (%)	Average net expenditure (\$)	Expenditure/ income ratio (%)	EGMs per 1000	SEIFA score
Regional Victoria					
Loddon Mallee	0.8 (1)	330 (3)	2.0 (3)	4.6 (3)	935 (1)
Gippsland	0.5 (2)	617 (1)	3.9 (1)	7.8 (1)	946 (3)
Barwon	0.4 (3)	445 (2)	2.8 (2)	7.1 (2)	972 (5)
Hume	0.4 (3)	279 (5)	1.7 (5)	4.6 (3)	955 (4)
Grampians	0.1 (5)	284 (4)	1.8 (4)	4.2 (5)	937 (2)

	Problem gamblers (%)	Average net expenditure (\$)	Expenditure/ income ratio (%)	EGMs per 1000	SEIFA score
Metro					
North & West	1.2 (1)	707 (1)	4.9 (1)	6.4 (1)	1014 (1)
Southern	0.8 (2)	582 (2)	3.8 (2)	5.8 (2)	1038 (2)
Eastern	0.3 (3)	564 (3)	3.2 (3)	5.7 (3)	1065 (3)

Note. 'Average net expenditure' is the average expenditure on EGMs per person over 18 years of age; 'Expenditure/income ratio' presents average expenditure on EGMs as a ratio of average incomes; 'EGMs per 1000' is the number of EGMs per 1000 people over 18 years of age; 'SEIFA score' refers to the Socio-Economic Indexes for Areas which provides 'a method of determining the level of social and economic well-being in each region' (ABS 2008). A higher score corresponds to higher levels of relative wellbeing. Source: Commission analysis from data provided by the VCGLR; DOJ 2009b

Appendix B

Participant Profile Questionnaire

Previously Regis	tered	Y D N C	2								Date:		
Name (First,	Last)										ОМ	ΠF	
Marital Status:	🗆 Single	Partnere	d 🗆 Ma	arried	🗆 Sep	arated	Divor	ced D	3 Widow	ed	Prefer	not to	disclose
Age Group	□ <25	25 – 30	31 -	40 🗆	41 - 50	0 🗆 51	- 60 🗆 :	> 60					
Address:													
Phone (Worl	k):												
Phone (Home):													
Phone (Mobile):													
Email:													
How would y	ou prefer u	us to contac	t you?	C Wor	rk 🗆	Email	DH	iome 🗆	Mail 🗆	Mobile	2		ot at all
Do you work	?			□ Yes		🗆 No	🗆 Re	tired					
If yes:				🗆 Full-	-time	🗆 Par	t-time [Casua	il in the second se				
Are you avai	lable on the	e weekend?		Yes		0 🗆	Sometime	s					
Are you avai	lable during	g the day?		C Yes		0 🗆	Sometime	s					
Do you have	access to a	a computer?	?	C Yes		0 🗆	Sometime	s					
Language sp	oken other	than Englis	sh?										
Do You need	services of	f an interpr	eter?	Yes		lo							
Some people	need assis	stance with	the writ	ten wor	d, as v	ve nee	d you to f	ill out p	pre-and	post-	evaluatio	on form	ns:
- would you li	ke us to arra	nge somebor granhe /vide	ly to help	you with	this?	ovente		Yes L					
These photos promotional p	/videos may urposes.	be used by u	is within t	he group	event	s and /o	r to help p	ublicize	this pro	gram f	or future	educatio	onal and
Do you conse Consent form	ent to being attached	g photograp	hed?		ΠY	es	□ No If	Yes – p	lease rei	ad and	sign the l	Photogr	aph & Film
If yes are yo	u happy to	be identifie	d?	🗆 Yes] No							
			-										
Do you have	a current o	friver's licer	1se?			J Yes	D No	-					
would you b	e willing to	use your o	wn car to	get to	event	5?	LI Tes						
Is your life o	ut of balan	ce because	of gamb	ling?			U Yes						
Do you have any medical condition/s that may affect your participation in the program? Physical: Mental: Please provide details of any medication that may need to be reported to your treating doctor in the event of an emergency:													
Do you have a	iny allergies:												_
In case of an	emergenc	y who shou	ld we co	ntact:	N	IAME:				PHON	E:		
Do you have	any specia	l dietary re	quiremer	ıts?									
How did you Referral throu Newspaper	hear about gh Gamblers	t the Free Y Help Ref	ourself P erral	Fan Cth	: cirdle nily/Fri ner	the ans ends	wer or wri Flyer (whe	ite in the ere did y	e space j vou pick	provide it up)_	d		
1													

Are you seeing a counsellor?									
Yes	D No	Please circle:	Gambling Specific	Financial	Mental Health	Other			
The Free approx.	e Yourself 3 hours di	Program require uring the course	es participants to be avail of the program. Are you	able weekly on altern able to attend most	nate Saturdays or Sundays f of those weekends?	or	□ No		
The Free Are you	e Yourself willing to	Program will be participate by fill	part of an independent e ling out questionnaires be	valuation to assess the fore commencing the	ne effectiveness of the prog e program and after comple	ram. tion?	□ No		

Appendix C

Pre-existing Medical Conditions Form

Chrysalis Insight Inc. PO Box 1271 Blackburn, VIC 3130 ABN: 63 403 743 841 Ph: 0428 304 041 admin@chrysalisinsight.org.au www.chrysalisinsight.org.au

PARTICIPANT

Pre-Existing Conditions Declaration

In accordance with s82(7)-(9) of the Accident Compensation Act 1985 (Vic) ("the Act"), you are required to disclose any, or all pre-existing injuries, illnesses or diseases (preexisting conditions) suffered by you which could be accelerated, exacerbated, aggravated or cause to recur or deteriorate by you participating in the **Free Yourself Program** managed by Chrysalis Insight Inc.

If you have a pre-existing physical/mental health condition, consideration will be given to reasonable modification to the environment of the tasks if it is possible and practicable.

Failure to disclose this information or providing false and misleading information in relation to this issue, under s82(8) and s82(9) of the Act you may not be entitled to any form of compensation as a result of the recurrence, aggravation, acceleration, exacerbation or deterioration of a pre-existing condition.

Pre-Existing Conditions Declaration:

I, (name) declare that:

 I have read and understood the above information and I understand the responsibilities and physical demands as a participant of the Free Yourself Program • I acknowledge that I am required to disclose all pre-existing conditions which I believe may be affected by me participating in this Program. Failure to disclose this information or providing false and misleading information in relation to this issue, under s82(8) and s82(9) of the Act, that I may not be entitled to any form of compensation as a result of the recurrence, aggravation, acceleration, exacerbation or deterioration of a pre-existing condition.

Please tick the appropriate statement:

I have no conditions or suffered prior injuries that may recur or deteriorate, accelerate or be exacerbated or aggravated by becoming a participant

or

I have an existing condition/s or have prior injury or physical/mental health conditions that may recur or deteriorate, accelerate or be exacerbated or aggravated by becoming a participant

Please list details of all pre-existing physical/mental health conditions/injuries:

Please list details of all prescribed medication:

I, acknowledge and

declare that the information provided in this form is true and correct

Participant Signature

Print Name

Date

Office use:

Volunteer Coordinator, First Aider and Program Manager informed of pre-

existing conditions status _/_/___

Appendix D

Evaluation Consent Form

The Problem Gambling Research and Treatment Centre

An initiative of the Victorian Government, the University of Melbourne and

"Evaluation of the (Re)Making Meaning Program"

Name of participant:

Name of investigator(s): Professor Alun Jackson, Kate Francis & Gabi Byrne

- 1. I consent to participate in this project, the details of which have been explained to me.
- 2. I understand that after I sign and return this consent form it will be retained by the researcher.
- 3. I authorize the research staff to use the data provided for the purpose of evaluation
- 4. I acknowledge that:
 - a. the possible effects of participating in the *evaluation* have been explained to my satisfaction;
 - b. I have been informed that I am free to withdraw from the project at any time without explanation or prejudice and to withdraw any unprocessed data I have provided;
 - c. I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements
 - d. I have been informed that any references to personal information that might allow someone to guess my identity will be removed but that as the number of people involved is small, it is possible that someone may still be able to identify me

- e. I have been informed that my de-identified questionnaire will be stored in a locked cabinet and will be destroyed after five years;
- f. my name will be referred to by a pseudonym if necessary in any publications arising from the research;
- g. I have been informed that a copy of the evaluation findings will be forwarded to me if I request this.

I wish to receive a copy of the summary project report on research findings \Box yes

(please tick)

□ no

Participant signature: Date:

Appendix E

Program Report Volunteer Training Facilitator

Three full day training workshops for volunteers were conducted. Each workshop was designed and presented by Valerie O'Brien from Talking Solutions Pty Ltd.

Training Program Design

The workshop designer met with the Dare to Connect Program Manager on two occasions prior to the first training session. At these meetings the workshop designer obtained a briefing regarding the Dare to Connect program and workshop content was agreed.

Discussions were conducted with DARE TO CONNECT program management prior to each of the second and third workshops. Feedback from participant evaluations from the previous training sessions and observations of DARE TO CONNECT programs managers was incorporated into the design of each workshop.

A particular issue in the training program design was that volunteers were recruited throughout the year. Therefore, workshops two and three included volunteers who had covered the core content of the workshops before as well as volunteers who were hearing the material for the first time.

The training designer and DARE TO CONNECT managers agreed that it was necessary for every volunteer to be trained in the core content areas outlined below. Therefore, the core content areas were covered in each session.

Core skills covered in each workshop:

 Understanding and adhering to my role as a volunteer support person – knowledge of policies and procedures. Identification of what is "over involved" or "underinvolved" in the volunteer role

Values clarification - respect, confidentiality, self-efficacy, tolerance of ambiguity and difference

- Self-care understanding of the stress response and practice in the use of resilience tools. Self-care was seen as a priority for volunteers given the emotional laden content of their work and the potential for stressors relating to gambling to reactivate stress issues for the volunteers
- Communication strategies used in supporting strength and autonomy in emotion laden interaction – strategies for deciding whether to open up or contain communication depending on volunteer role and skills, timing issues, motivation and context. Specific communication skills of questioning, active listening and providing verbal and nonverbal encouragement
- How to seek support from my program leader for areas outside my volunteer role Training outcomes

The workshop presenter observed a deepening in the volunteers understanding of the core issues during each workshop.

Written workshop evaluations from the volunteers strongly indicated that the volunteers found the workshop beneficial in helping them to learn necessary skills for their roles. DARE TO CONNECT managers observed that workshop content was informing the practice of the volunteer during DARE TO CONNECT activities.

In the presenter's view, the strategy of re-presenting the core subject areas during each workshop was of benefit to all. The presenter observed that volunteers who had attended previous workshops showed a deepening of their understanding of the core concepts. The astute comments of the volunteers who had covered the material in previous workshops and had applied their learning to DARE TO CONNECT activities, helped steer the thinking of the newer members.

Appendix F

Complete Standard Measures Questionnaire

(Re)Making Meaning Evaluation Tools Study ID:	
Were you born in Australia? Yes No If no, please state which country	
Are you currently receiving counselling for problem gambling? Yes No	
How much time would you spend thinking about gambling?	
None of the time A little of the time Some of the time All of the time All of the time	
Are you currently gambling? Yes No I If yes: describe a typical fortnight About how much time did you spend gambling?:	
Which of the following statements applies to you right now?	
I have no intentions of changing my gambling.	
I am considering reducing or stopping my gambling in the next six months.	
I plan to reduce or quit my gambling in the next month.	
I have already begun to reduce or quit my gambling within the last six months.	
I reduced or quit my gambling over six months ago and have been able to maintain these changes for at least six months.	

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Temptation to Gamble

Please rate how tempted to gamble you would feel in the following circumstances. (Zero means not at all tempted and five means extremely tempted) Circle your answer.	Not at all Tempted			Extremely Tempted		
If I was feeling angry or frustrated with myself or because things were not going my way.	0	1	2	3	4	5
If I was feeling anxious or tense.	0	1	2	3	4	5
If I was feeling sad.	0	1	2	3	4	5
If I was feeling physically uncomfortable because I want to gamble.	0	1	2	3	4	5
If I was feeling angry and frustrated because of my relationship with someone else.	0	1	2	3	4	5
If I was with others, having a good time and we feel like gambling together.	0	1	2	3	4	5
If I was feeling worried or tense because of my relationship with someone else.	0	1	2	3	4	5
If I was feeling others were being critical of me.	0	1	2	3	4	5
When I wanted to escape from my thoughts and feelings.	0	1	2	3	4	5

(Re)Making Meaning Evaluation Tools

Please rate how tempted to gamble you would feel in the following circumstances. (Zero means not at all tempted and five means extremely tempted) Circle your answer.	Not at Tempt	all ed			Extremely Tempted		
If I was feeling bored.	0	. 1	2	3	4	5	
If I was in a good mood.	0	1	2	3	4	5	
If I wanted to see what would happen if I gambled just a little.	0	1	2	3	4	5	
If I felt tempted to gamble out of the blue.	0	1	2	3	4	5	
If an opportunity to gamble happened out of the blue.	0	1	2	3	4	5	
If I wanted to win.	0	1	2	3	4	5	
If I needed to win back past losses.	0	1	2	3	4	5	
If I felt lucky.	0	1	2	3	4	5	
If I felt pressured by financial debts.	0	1	2	3	4	5	
If someone invited me to gamble.	0	1	2	3	4	5	
If I saw others gamble.	0	1	2	3	4	5	
When I am in a situation in which I am in the habit of gambling.	0	1	2	3	4	5	

Work and Social Impacts of Gambling

In answer to each of the five questions below, please circle the number which reflects your situation using the following scale $(0 = not at all impaired to 8 = very severely impaired).$									
	Not a impa	at all ired	•				•	Extre	emely paired
Because of my gambling my work is impaired.	0	1	2	3	4	5	6	7	8
Because of my gambling my home management (cleaning, tidying, shopping, cooking, looking after home or children, paying bills) is impaired.	0	1	2	3	4	5	6	7	8
Because of gambling my social leisure activities (with other people such as parties, bars, clubs, outings, visits, dating or home entertainment) are impaired.	0	1	2	3	4	5	6	7	8
Because of my gambling my private leisure activities (done alone such as reading, gardening, collecting, sewing, walking alone) are impaired.	0	1	2	3	4	5	6	7	8
Because of my gambling my ability to form and maintain close relationships with others, including those I live with, is impaired.	0	1	2	3	4	5	6	7	8

Personal Well-Being

Circle the answer that best describes your situation.

I feel that I am a person of worth, at least on an equal plane with others.	strongly agree	agree	disagree	strongly disagree
I feel that I have a number of good qualities.	strongly agree	agree	disagree	strongly disagree
All in all, I am inclined to feel that I am a failure.	strongly agree	agree	disagree	strongly disagree
I am able to do things as well as most other people.	strongly agree	agree	disagree	strongly disagree
I feel I do not have much to be proud of.	strongly agree	agree	disagree	strongly disagree
I take a positive attitude toward myself.	strongly agree	agree	disagree	strongly disagree
On the whole, I am satisfied with myself.	strongly agree	agree	disagree	strongly disagree
I wish I could have more respect for myself.	strongly agree	agree	disagree	strongly disagree
I certainly feel useless at times.	strongly agree	agree	disagree	strongly disagree
At times I think I am no good at all.	strongly agree	agree	disagree	strongly disagree

Please circle the answer that you feel most closely reflects your situation.	none of the time	a little of the time	some of the time	most of the time	all the time
In the last four weeks, about how much of the time did you feel so sad that nothing could cheer you up?	1	2	3	4	5
In the last four weeks, about how much of the time did you feel nervous?	1	2	3	4	5
In the last four weeks, about how much of the time did you feel restless or fidgety?	1	2	3	4	5
In the last four weeks, about how much of the time did you feel hopeless?	1	2	3	4	5
In the last four weeks, about how much of the time did you feel that everything was an effort?	1	2	3	4	5
In the last four weeks, about how much of the time did you feel worthless?	1	2	3	4	5

Circle the number that best describes your situation.	not at all true	hardly true	moderately true	exactly true
I can always manage to solve difficult problems if I try hard enough.	0	1	2	3
If someone opposes me, I can find the means and ways to get what I want.	0	1	2	3
It is easy for me to stick to my aims and accomplish my goals.	0	1	2	3
I am confident that I could deal efficiently with unexpected events.	0	1	2	3
Thanks to my resourcefulness, I know how to handle unforeseen situations.	0	1	2	3
I can solve most problems if I invest the necessary effort.	0	1	2	3
I can remain calm when facing difficulties because I can rely on my coping abilities.	0	1	2	3
When I am confronted with a problem, I can usually find several solutions.	0	1	2	3
If I am in trouble, I can usually think of a solution.	0	1	2	3
I can usually handle whatever comes my way.	0	1	2	3

٦	The following question	ons ask <i>how you f</i>	eel about you	ur commun	ity.					
1	1. How many years	have you lived in y	our area? (Y	ears)					
2	2. Can you get help	from family or frier	nds when you	need it? Ple	ease Circ	le				
	Yes	Sometimes	No	Not at all		Don't know	w/Can't say			
9	3. Do you feel safe	walking alone dow	n your street a	after dark?	Yes	No				
4	4. Do you feel value	ed by society?	Yes	No						
Ę	5. Do you feel there	are opportunities t	o have a real	say on issu	es that a	re important	to you?	Yes	No	
e	6. Do you help out a	as a volunteer?	Yes	No						
7	7. Are you a member organisation?	er of an organised Yes	group such as No	a sports or	church g	roup of ano	ther community	organisation	or profes	ssional
8	8. Do you have sch	ool aged children?	Yes	No						
ç	9. Are you actively i	involved with activit	ies in the sch	ool? Yes	6	No				
1	10. Are you on a dec committee, body	ision making board corporate or reside	l or committee ent action grou	e such as a up? Yes	corporate S	board, sch No	ool council, spo	rts club comr	nittee, ch	urch
1	11.Have you attende	ed a local communi	ity event in the	e past 6 mo	nths such	n as a fete, fe	estival or schoo	l concert?	Yes	No
1	12.Do you like living	in your local comm	nunity?							
	Yes, definitely	Yes, someti	mes	No, not at	all	No, no fee	ling about it	Don'i	know /C	an't say

General Well-Being

For each of the following statements, please circle the response you feel					
most closely reflects your situation.					
There is always someone I can talk to about my day-to-day problems.	Yes!	Yes	More or less	No	No!
I miss having a really close friend.	Yes!	Yes	More or less	No	No!
I experience a general sense of emptiness.	Yes!	Yes	More or less	No	No!
There are plenty of people I can lean on when I have problems.	Yes!	Yes	More or less	No	No!
I miss the pleasure of the company of others.	Yes!	Yes	More or less	No	No!
I find my circle of friends and acquaintances too limited.	Yes!	Yes	More or less	No	No!
There are many people I can trust completely.	Yes!	Yes	More or less	No	No!
There are enough people I feel close to.	Yes!	Yes	More or less	No	No!
I miss having people around me.	Yes!	Yes	More or less	No	No!
I often feel rejected.	Yes!	Yes	More or less	No	No!
I can call on my friends whenever I need them.	Yes!	Yes	More or less	No	No!

Appendix G

Evaluation form sample for events

Thank you for your participation in the follow up events of the Dare To Connect North West Project. To assist us to evaluate the events so far, we would be grateful if you would take a few minutes to provide some feedback using the following form.

Part A:

Please indicate which of the following events you have attended and if not which of the statements indicate the reason you didn't attend:

Follow-up events	Attended the event	Couldn't make it	Didn't interest me
27 th September Grand Final Party at Coburg RSL			
5th October 'Personal Values and Goal Setting			
11th October 'Tour of Footscray Library & Lunch'			
19th October 'Resilience'			
25th October 'Barefoot bawling'			
2nd November 'Communication Skills'			
8th November 'Volunteering'			
15th November 'Celebration Party'			

Part B:

Thinking about the follow-up events as a whole, please circle a number on the 1-5 scales below to indicate your agreement with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I was satisfied with the way the organised activities ran.	1	2	3	4	5
The activities were relevant to my interests.	1	2	3	4	5
The skill learning sessions were of high quality.	1	2	3	4	5
Instructions relating to the events were communicated effectively.	1	2	3	4	5
The workshops were engaging and held my interest.	1	2	3	4	5
I feel more positive about working within the group.	1	2	3	4	5
I haven't had so much fun in a long time.	1	2	3	4	5
I feel I learnt new skills.	1	2	3	4	5

Part C:

Thinking about each of the events activities you participated in, please circle your overall level of satisfaction with that activity:

Grand Final Party

| Very satisfied | Unsatisfied | Very Unsatisfied

Values & Goal setting	Very satisfied Satisfied Unsatisfied Very Unsatisfied
Library & Lunch	Very satisfied Satisfied Unsatisfied Very Unsatisfied
Resilience	Very satisfied Satisfied Unsatisfied Very Unsatisfied
Barefoot Bowling	Very satisfied Satisfied Unsatisfied Very Unsatisfied
Volunteering	Very satisfied Satisfied Unsatisfied Very Unsatisfied
Please feel free to make especially comments that	e any other comments about the activities and suggestions at would help us improve it for future programs.
Part D: We hope that these activ meaning in your life and	ivities have helped you to continue the process of finding d re-connecting with other people and activities.
Part D: We hope that these activ meaning in your life and Reflecting on the	ivities have helped you to continue the process of finding d re-connecting with other people and activities. e project so far, are we on the way to meeting these goals?
Part D: We hope that these activ meaning in your life and Reflecting on the Partially met	vities have helped you to continue the process of finding d re-connecting with other people and activities. e project so far, are we on the way to meeting these goals? Entirely met
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Part D: We hope that these activ meaning in your life and Reflecting on the Partially met D Please indicate if you	ivities have helped you to continue the process of finding d re-connecting with other people and activities. e project so far, are we on the way to meeting these goals? Entirely met u are a: Support person □ Participant □ ank you for spendinty time on this evaluation
Part D: We hope that these activ meaning in your life and Reflecting on the Partially met Please indicate if you The	ivities have helped you to continue the process of finding d re-connecting with other people and activities. e project so far, are we on the way to meeting these goals? Entirely met u are a: Support person Participant ank you for spending time on this evaluation
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Appendix H

Inside the Circle Looking Out (Examples from the booklet MC2)

Wheels are spinning round and round, My feet don't touch the ground, Taking me to a place I've been before Darkness, Loneliness, Despair and Shame, Why can't I escape this feeling I know I'm not alone, Others have been there before WHAT IF WHAT IF WHAT IF WHAT IF WHAT IF WHAT IF WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today?	
My feet don't touch the ground, Taking me to a place I've been before Darkness, Loneliness, Despair and Shame, Why can't I escape this feeling I know I'm not alone, Others have been there before WHAT IF WHAT IF WHAT IF WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today? So much has passed me by, the pain of it all almost too much to bear alone.	Wheels are spinning round and round,
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Corrections of the series o	Taking me to a place I've been before
Darkness, Loneliness, Despair and Shame, Why can't I escape this feeling I know I'm not alone, Others have been there before WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today?	00000000000
Why can't I escape this feeling I know I'm not alone, Others have been there before WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today? WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today? So much has passed me by, the pain of it all almost too much to bear alone.	Darkness, Loneliness, Despair and Shame,
I know I'm not alone, Others have been there before WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today?	Why can't I escape this feeling
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WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today? So much has passed me by, the pain of it all almost too much to bear alone.	Others have been there before
WHAT IF WHAT IF WHAT IF Would it have been any different to where I am today? So much has passed me by, the pain of it all almost too much to bear alone. A lifeline is offered in MoreConnect, A lifeline to help me laugh and live once again, Giving me the strength to put my feet on the ground, To build new friends, Sharing this renewal together. A life with more purpose and, Shades of joy that have been missing for so long. With each gathering I'm feeling stronger and stronger, Helping me find a new pathway, To make a new life, Free from the void of just watching the wheels spinning round, and life just passing me by.	*****
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So much has passed me by, the pain of it all almost too much to bear alone.	Would it have been any different to where I am today?
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To make a new life, Free from the void of just watching the wheels spinning round, and life just passing me by.	Helping me find a new pathway,
Free from the void of just watching the wheels spinning round, and life just passing me by.	To make a new life,
and life just passing me by.	Free from the void of just watching the wheels spinning round,
0000000000	and life just passing me by.

Creativity Music Movement Laughter are the	Creativity Music Movement Laughter are the
Shades of Light giving me the strength to move forward.	Shades of Light giving me the strength to move forward.
New friends sharing a helping hand, joining together to	New friends sharing a helping hand, joining together to
Make a difference in each others lives.	Make a difference in each others lives.
000000000000	00000000000
This is special in appone's terms	This is special in anyone's terms
This is special in anyone's terms.	This is special in anyone's terms.



The MoreConnect Program inspired me to take up knitting again after more than 25 years. Something to keep both my hands and mind occupied and to keep me out of the pokies!

I didn't think I could even remember how to knit so I started small by knitting a beanie for my granddaughter... and then I knitted another one. It wasn't until after I finished the second beanie I thought "wow I do remember how to knit"! What can I do now? So I knitted a cardigan to match the first beanie. I am very happy with the end result and am looking forward to my next project.

For many, many years I battled with my gambling addiction alone. Thanks to the MoreConnect Program and my Gamber's Help counsellor, I have been pokie free now for more than four months. The MoreConnect Program has literally saved my life.


A NOTE TO MORECONNECT 1 and 24 My life had come down to just silling on a sted and storing at a machine and feeding it money at one one many patries venue that I visited, oblivious to the people around me and without a care in the world. "Dead to the world" more lit it. Thanks to the Dare to Connect group, MORECONNECT 1 under the leadership of Gabriela Byrne (CHRYSALIS) for the valued and sincere support my life is becoming more normal and I am able to Visualise a light at the end of the tunnel. More connect 2, led by haven Milgrom has beome very important to me, giving me confidence to join in with life and to participate in many outings with this wonderful group of people I am now enjoying movie nights, art & craft, cooking class picnics, barbequies, waltring tours and many more activities. At tast, surely I was engaging with people and life Without More connect, I would without a shadow of a doubt still be preoccupied with the trapings of a miserable and devostating lifestyle with no hope for the future and the only outings or activities would be on a machine at a pothes vertue. Jours Tealy Luisa.

Appendix I

Letter to Volunteers Explaining Research and Consent Form

Chrysalis



20/6/2015

Dear Volunteer of the Dare To Connect Program,

We would like you to participate in the evaluation of the Dare To Connect Project. This project has been funded by the Victorian Responsible Gambling Foundation under the 'Prevention Grants Program''. Chrysalis Insight Inc. has been contracted to facilitate the evaluation of the program and has hired Thomas Delbridge as a research assistant. The evaluation will provide the funding body with information on the effectiveness of 'Dare To Connect' as a form of intervention aimed at decreasing social isolation and lessening the risk of gambling relapse. To measure the effectiveness of the program overall it is critical to look at all of the components that this program includes. Your role in this program as a support person/volunteer is very significant and recognised by the funder, the management team but most importantly by the participants of the program. But how important is this part, the volunteer role in your own recovery journey?

Participation in the evaluation will involve completing a questionnaire similar to the one that you completed at the end your role as a participant. This questionnaire will be administered by Thomas Delbridge who is contracted to do the evaluation. The information gathered will be reported in a de-identified way. Participation is entirely voluntary. We do encourage you to participate because your responses will help us understand what works in practice, which then helps us to make recommendation about future programs.

It is important that you answer questions as honestly as possible.

We then follow up with a one-to-one interview. The interviewer will be Thomas Delbridge who studies at RMIT and has previous research experience. He will organise a date and time that suits you. The interview will be approximately 1hr and at a location of your choice. It will be recorded. When answering questions you can stop at any time. If you experience distress at any stage as a result of answering the questions you will be given the opportunity to debrief with the researcher and be linked back to the project coordinator for support. Remember your participation in the evaluation is completely voluntary and it will not in any way prejudice your involvement in the project.

All the information gathered during this research will be treated as confidential. The researcher will be provided with a number (not a name) allocated for tracking. The researcher will have no access to identifying information. The findings of the research will be reported in a de-identified summary report. The results will be published in academic journals. This research will conform to the requirements set out in University protocol's for ethical research. Should you require further information or would like to discuss the research or any concerns that you may have please do not hesitate to contact the project manager Gabi Byrne (0414 844 387)

Thank you so much for considering taking part in this research project

Appendix J

Letter to Volunteers and Consent Form

Dear Volunteer of the Dare To Connect Program,

We would like you to participate in the evaluation of the Dare To Connect Project. This project has been funded by the Victorian Responsible Gambling Foundation under the 'Prevention Grants Program''. Chrysalis Insight Inc. has been contracted to facilitate the evaluation of the program and has hired Thomas Delbridge as a research assistant.

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All the information gathered during this research will be treated as confidential. The researcher will be provided with a number (not a name) allocated for tracking. The researcher will have no access to identifying information. The findings of the research will be reported in a de-identified summary report. The results will be published in academic journals. This research will conform to the requirements set out in University protocol's for ethical research.

Should you require further information or would like to discuss the research or any concerns that you may have please do not hesitate to contact the project manager Gabi Byrne

Thank you so much for considering taking part in this research project

Consent Form

Title	Evaluation: "How important is the role of providing peer support in the
	Dare To Connect program in lessening the risk of problem gambling
	relapse for previous Participants?"
Short Title	Volunteer Study
Project Sponsor	Victorian Responsible Gambling Foundation
Coordinating Principal	Gabriela Byrne; Project Manager Dare To Connect
Investigator	PhD student at Victoria University

Associate Investigator(s) Thomas Delbridge, RMIT

Declaration by Participant

I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

I understand the purposes, procedures and risks of the research described in the project.

I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time during the project without affecting my future care.

I understand that I will be given a signed copy of this document to keep.

 Name of Participant (please

 Signature

Declaration by Researcher †

I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

```
Name of Researcher<sup>†</sup> (please
print)
Signature
```

An appropriately qualified member of the research team must provide the explanation of, and information concerning, the research project.

Appendix K

Volunteer Questionnaire Protocol

- 1. Could you tell me a little bit about yourself and your story with gambling?
- 2. Could you tell me why did you get involved in the program?
- 3. Could you tell me when did you start volunteering for the program?
- 4. Could you tell me what motivated you start volunteering with the Dare to Connect program?
- 5. Could you tell me as a participant, how did you see the role of the volunteers?
- 6. Could you tell me about your role as a volunteer, what did that involve?
- 7. Could you tell me how important do you think your volunteering role was in helping you recover from problem gambling?
- 8. Could you tell me within that volunteer role, what aspects of operating in that role do you consider helpful for your own recovery?
- 9. Could you tell me about the skills that you developed, if any, and how they affected your role as a volunteer?

- 10. Could you tell me about the volunteer training? What aspects did you find helpful for undertaking your role as a volunteer?
- 11. Could you tell me is there anything that the Free Yourself Program could provide that would make your role as a volunteer easier?
- 12. Could you tell me how do you think your path to recovery would of changed if you had not volunteered with the program?
- 13. Could you tell me how important do you think your volunteering role was in helping you recover from problem gambling?
- 14. Could you tell me have you thought about what are your next steps are?
- 15. Could you tell me where do you see yourself in 1 to 3 years?

Appendix L

Example of an Extract from Reflective Journal

Reflective Journal 12/2/16

Volunteer F-08 just interviewed.

Shorter term volunteer. Articulated that she has become a lot more self-aware. Interacting with lots of different people can bring about that self-awareness.

Still very aware of the triggers and vulnerable to those triggers. However she really vocalised that she was very happy that she has great relationships with her children again. She is again responsible to the upkeep of her relationship with her children and that gives her purpose.

Purpose as a potential theme. Remaking the meaning of their life. Remaking their relationship with gambling.

Improving the reality of their existence.

Obviously sees the benefits in the socialisation of the program. Social Inclusion as a theme. Community outside of gambling. Peer support help model. Social isolation major contributing factor to gambling addiction.

Key components of program. Why do they change? What else is at play?

Champions (Gabi, Lorraine).