Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions.

by

Hannah Pitt
BPHN, MPH

Submitted in fulfilment of the requirements for the degree of

Doctor of Philosophy

Deakin University

March, 2018
Access to thesis

I am the author of the thesis entitled:

Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions

submitted for the degree of Doctor of Philosophy

This thesis may be made available for consultation, loan and limited copying in accordance with the Copyright Act 1968.

'I certify that I am the student named below and that the information provided in the form is correct'

Full Name: Hannah Pitt

(Please Print)

Signed: [Signature Redacted by Library]

Date: 20.02.18
Candidature declaration

I certify the following about the thesis entitled

**Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions.**

submitted for the degree of **Doctor of Philosophy**

I am the creator of all or part of the whole work(s) (including content and layout) and that where reference is made to the work of others, due acknowledgment is given.

The work(s) are not in any way a violation or infringement of any copyright, trademark, patent, or other rights whatsoever of any person.

That if the work(s) have been commissioned, sponsored or supported by any organisation, I have fulfilled all of the obligations required by such contract or agreement.

That any material in the thesis which has been accepted for a degree or diploma by any university or institution is identified in the text.

All research integrity requirements have been complied with.
'I certify that I am the student named below and that the information provided in the form is correct'

Full Name: Hannah Pitt

(Please Print)

Signed:

Signature Redacted by Library

Date: 20.02.18
Acknowledgments

There have been a number of people throughout my PhD that have helped and encouraged me along the way who I would like to acknowledge.

Firstly, my supervisors and other work colleagues. I would like to thank my primary supervisor Associate Professor Samantha Thomas for her guidance, encouragement and support throughout my PhD, and for all of the opportunities that she has given me over the years. The support and insights from my associate supervisors Professors Mike Daube and Jeffrey Derevensky has also been greatly appreciated. I would also like to acknowledge the other co-authors on my publications for their contributions to the research presented in this thesis.

Secondly, I would like to thank my family and friends who have supported me and listened to me talk endlessly about my PhD and the research I have been a part of.

Lastly, I would like to thank all of the participants in all of my studies. Without their willingness to participate, their knowledge and opinions we would not be able to conduct the research that we do.
Publications and Conference Presentations

The following is a list of publications resulting from the research conducted in this thesis. This includes journal articles, published conference abstracts, conference presentations and posters.

Journal articles


https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-017-0136-3

Published conference abstracts


Oral conference presentations


*Poster conference presentations*


*Media Outputs*

The following is a sample of the media articles that contained the findings from the research presented in this thesis.


Declarations

The research in this thesis is part of an Australian Research Council (ARC) Discovery Grant on Sports Wagering [DP140102210]. I have received an Australian Government Research Training Program Scholarship as part of the ARC Discovery Grant. I have also received funding from the University of Wollongong and Deakin University, via Faculty and School based funding opportunities.
Table of Contents

Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions ........................................ 1

Chapter 1. Overview .................................................................................................................. 1
  1.1 Chapter overview .............................................................................................................. 1
  1.2 Background: The sports betting environment in Australia ........................................... 2
    1.2.1 The expansion of sports betting in Australia: a changing regulatory environment ......................................................... 2
    1.2.2 The increasing consumption of sports betting products in Australia .... 4
    1.2.3 Sports betting and young people: gaps in knowledge .............................................. 5
  1.3 Aim and research questions ......................................................................................... 7
  1.4 Theoretical lens: Consumer Socialisation Theory [Ward, 1974] ................................. 7
  1.5 Conceptual framework ............................................................................................... 9
  1.6 Overview of the studies presented in the thesis ......................................................... 11
    1.6.1 Study One: Understanding how adolescents and their parents conceptualise the relationship between gambling and sport ............................ 11
    1.6.2 Study Two: Strategies within sports betting advertising that may have specific appeal for young people .................................................. 13
    1.6.3 Study Three: The role of sport as a normalising and socialising agent for sports betting ................................................................. 14
    1.6.4 Study Four: The influence of sports betting advertising on young people’s attitudes, knowledge and consumption intentions .................. 17
  1.7 Significance of the thesis ............................................................................................ 20
  1.8 Chapter summary ........................................................................................................ 21

Chapter 2. Literature Review ............................................................................................. 23
  2.1 Chapter overview .......................................................................................................... 23
  2.2 Understanding gambling harm in Australia: A public health approach ................. 23
    2.2.1 Public health approaches to gambling research and policy: shifting to a focus on the commercial determinants of gambling harm .................. 23
  2.3 Sports betting in Australia ......................................................................................... 30
    2.3.1 The liberalisation of sports betting in Australia ................................................... 30
    2.3.2 Participation in sports betting: prevalence and harm ........................................ 32
  2.4 The promotion of online sports betting ..................................................................... 33
    2.4.1 The regulatory environment for the promotion of sports betting ................... 33
    2.4.2 Advertising spend and trends: the alignment with sport .................................. 35
    2.4.3 Strategies within sports betting advertisements ................................................. 36
  2.5 Young people and gambling ....................................................................................... 37
10.2 Research question one: What do young people recall from the advertising that they see from online bookmakers in different media and community environments? .................................................................................................. 154

10.3 Research question two: How does sports betting advertising play a role in shaping the gambling attitudes and consumption intentions of young people? 157

10.4 Research question three: What is the influence of the alignment between gambling and sport on the gambling attitudes, knowledge and consumption intentions of young people? ............................................................................. 159

10.5 Research question four: What are the range of public health strategies that may be used to respond to the influences of sports betting advertising on young people? ............................................................................. 162

10.6 Thesis impact ............................................................................................ 167

10.6.1 Impact of evidence in the media ........................................................ 167

10.6.2 Impact of evidence on governments and policy ..................................... 168

10.6.3 Impact of evidence on education campaigns ....................................... 169

10.6.4 Publication impact ............................................................................. 169

10.6.5 Translation of research at conferences ............................................... 170

10.7 Conclusions .............................................................................................. 172

10.8 Chapter summary ..................................................................................... 173

Chapter 11. References ......................................................................................... 174

Appendix A: A review of the literature on gambling advertising and young people (2003-2017)* ........................................................................................................ 190

Appendix B: Publication License ................................................................. 202

Appendix C: A sample of research findings in the media ................................. 207

Appendix D: Newspaper article ........................................................................ 210

Appendix E: The Today Show “Mixed Grill” segment .................................... 212

Appendix F: Victorian Premier Facebook post ............................................ 213

Appendix G: Victorian Responsible Gambling Foundation ‘Love the Game Not the Odds’ ........................................................................................................ 214

Appendix H: Human Research Ethics Training ............................................. 215

Appendix I: Research Integrity Training ....................................................... 216
List of Figures

Figure One: Conceptual framework
Figure Two: Example of a completed A3 picture board activity
Figure Three: Example of a completed picture board representing which gambling products a child thought was most popular
Figure Four: Example of a completed picture board representing which group of people a child thought would bet on sport the most
Figure Five: Example of a completed picture board representing which sports a child thought people would bet on the most
List of Tables

Table One: Overview of the four studies in this thesis
Table Two: Publication impact
Abbreviations

AANA: Australian Association of National Advertisers
ACT: Australian Capital Territory
AFL: Australian Football League
EGM: Electronic Gambling Machine
NRL: National Rugby League
NSW: New South Wales
SEIFA: Socio-Economic Index for Areas
TAB: Totalisator Agency Board
WA: Western Australia
Chapter 1. Overview

1.1 Chapter overview

On the 1st September 1976, a ban on the broadcasting of advertising for tobacco in Australia came into effect [Australian Government, 2017]. Prior to this young people in Australia were exposed to a significant amount of promotion for cigarettes, both within television programs, and aligned with the sponsorship of sporting teams and codes. A range of research studies have demonstrated that the advertising for tobacco products had a significantly positive influence on young people’s smoking attitudes and consumption intentions [Aitken et al., 1991; Choi et al., 2002; Lovato et al., 2011; Pierce et al., 1998; Wellman et al., 2006]. While good public health policy prevented millions of young people from being exposed to the promotion of cigarettes, and played a significant role in preventing the next generation of smokers [Blecher, 2008; Saffer and Chaloupka, 2000], young people are now exposed to arguably a more sophisticated range of advertising strategies for a new range of harmful products. One of those products is online sports betting. Every day in Australia, young people see the advertising for sports betting products in their community environments, on television and social media, and at sporting venues [Thomas et al., 2012; Thomas et al., 2015]. However, unlike tobacco, there has to date been very limited research seeking to understand how sports betting advertising strategies may positively (or negatively) shape young people’s gambling attitudes and consumption intentions, and the range of public health and regulatory strategies that may respond to these tactics.

This chapter provides a rationale for the context and focus of this thesis and the broad aims and research questions associated with the thesis. It provides an overview of the conceptual and theoretical framework for the four studies (and five publications) within the thesis, a brief description of each of the five peer reviewed publications, and a summary of the significance of the thesis.
1.2 Background: The sports betting environment in Australia

The following section provides a brief context for the thesis, including overviews of, a) the expansion of online bookmakers in Australia, and the Australian regulatory environment; b) the subsequent mass promotion of sports betting; c) the increases in the consumption of sports betting products in Australia; and d) the current evidence base relating to the impact of sports betting advertising on young people’s attitudes and consumption intentions (outside of the publications in this thesis).

1.2.1 The expansion of sports betting in Australia: a changing regulatory environment

Australia has a relatively liberalised gambling environment with a range of low and high risk land based gambling products, including lotteries, electronic gambling machines (EGMs), wagering options, and casinos, which have been accessible and available in community settings since the 1970s [Australian Institute for Gambling Research, 1999]. Indeed, some have argued that gambling has become so embedded in community settings that it is often described as being part of Australia’s ‘culture’ [Australian Institute for Gambling Research, 1999; Woolley, 2009]. The state of Victoria, where much of the data for this thesis was collected, is the only place in the world with a national public holiday dedicated to a gambling event – the Melbourne Cup horse race. Despite this, gambling has had a relatively quiet, but uneasy, co-existence in Australian communities, with research consistently showing that while communities are not opposed to gambling, they are very supportive of the increased regulation of more harmful forms of gambling such as EGMs [McAllister, 2014; Thomas et al., 2017].

While there have been regular debates and discussions about the gambling industry in Australia, the introduction of online bookmakers into the Australian market has led to a more vocal opposition to the gambling industry, from politicians, public health practitioners, professional organisations, media commentators, and the community [Donaldson et al., 2016; Parliamentary Joint Select Committee on
Researchers have argued that this opposition, particularly relating to the potential impact of sports betting advertising on young people, was largely due to: a) the rapid alignment between online bookmakers and Australia’s highest profile sporting codes and broadcasters; b) the mass promotion of sports betting via multiple marketing channels, including within community settings, the media, and the sponsorship of sports; and c) inaction from government in relation to implementing regulatory frameworks to effectively restrict and reduce promotions for sports betting, particularly within children’s viewing hours [Chapman, 2017; Parliamentary Joint Select Committee on Gambling Reform, 2013; Thomas et al., 2012; Thomas et al., 2015]. In order to understand this opposition, and lack of government action, it is useful to consider the historical context of sports betting in Australia.

Betting on sports is not a new phenomenon in Australia, as people have been betting amongst themselves on sporting events for centuries. Since the 1980s, when sports betting was first legalised, Australians have been able to gamble on some forms of sports via land based operators such as the TAB. As technology has developed so too have the ways in which people can gamble on sport. The first online bookmaker, Centrebet, was introduced in 1996 [Williams and Wood, 2007]. However it was not until 2008 that Australia started to see a significant change in the provision and promotion of sports betting products. The rapid expansion and promotion of online sports betting in Australia has been largely attributed to a ruling made by the Australian High Court (in 2008) in favour of betting exchange operator Betfair Pty Limited [High Court of Australia, 2008]. This decision, which will be described in more detail later in this thesis, allowed corporate bookmakers to be registered in parts of Australia which had significant caps on taxation, and fewer restrictions on markets and promotions, but enabled online sports betting products to be offered and promoted throughout Australia [Hickman and Bennett, 2016].

At the time of writing, there were 27 registered online bookmakers in Australia, 21 of which were registered in the Northern Territory but offering and promoting these products throughout Australia [Department of the Attorney-General and Justice, 2017]. Online bookmakers offer markets on national and international
sports, horse and greyhound racing, as well as a range of novelty events such as the outcome of The Bachelor television show. An important distinction between Australia, and countries such as the UK and Ireland, is that there are very few land-based or ‘high street’ bookmakers in Australian communities. With the exception of the TAB, which has dedicated betting stores and online services, most corporate bookmakers operate solely through online websites and mobile apps. With no ‘physical’ shopfront presence, advertising is an essential part of brand awareness in a highly competitive market.

From 2011-15 there was a 160% increase in gambling advertising spend in Australia bringing the total spend to $236 million in 2015, with the bulk of this from online bookmakers [Hickman and Bennett, 2016]. In 2017, it was estimated that online corporate bookmakers had a television advertising spend of approximately $120-$150 million a year [Mason, 2017]. As will be explained in subsequent chapters in this thesis, the lack of comprehensive regulations relating to how, when and where bookmakers are able to promote their products, has contributed to a ‘saturation’ of advertising through multiple mediums including physical (for example billboards), television, radio and online media, and arguably has contributed to shaping young people’s attitudes towards these new gambling products.

1.2.2 The increasing consumption of sports betting products in Australia

An increase in the number of online bookmakers, and the promotion of their products, has seen a parallel increase in the amount of money spent and lost on sports betting in Australia. In 2015/16 over $900 million was spent on sports betting in Australia [Queensland Government Statistician's Office and Queensland Treasury, 2017]. While this represented only about 4% of the overall gambling spend on all forms of gambling ($23.6 billion), it was a 13% increase from 2014/15 ($814 million) [Queensland Government Statistician's Office and Queensland Treasury, 2017].

There are varying estimates about how many individuals over the age of 18 years gamble on sports. Community based studies generally have a fairly low estimate of
prevalence of engagement in sports betting. For example, a Victorian study reported that 5% of Victorian adults had bet on sports in 2014, with over half of these participants using mobile or online gambling platforms [Hare, 2015]. More recent community prevalence studies indicate that about 3% of adults gamble on sports at least monthly [Wilkins, 2017]. However, researchers have argued that land based community studies may significantly underestimate the number of adults who gamble [Abbott et al., 2016], because they do not adequately reach younger adults who may not respond to landline based studies (for example picking up land line telephones or answering door knocking) [Thomas et al., 2017]. Studies with online samples show a higher rate of participation with online forms of gambling. For example, a recent online panel study found that approximately one in five Victorian participants (17.4 %) reportedly gambled on sports on a monthly basis [Thomas et al., 2017]. Most studies to date have suggested that sports betting participation is higher in younger adults, and in particular younger men (18-35 years) [Hare, 2015]. While researchers consistently argue that young men are the key target market for the sports betting industry [Deans et al., 2016], there is emerging evidence that the sports betting industry may be diversifying advertising strategies to appeal to women [McCarthy et al., 2018]. This raises questions about the pathways for both girls and boys into sports betting, and the role that advertising may create in shaping positive attitudes and consumption intentions.

1.2.3 Sports betting and young people: gaps in knowledge

There is surprisingly limited research about the gambling attitudes and behaviours of young people. Australian and international research suggests that most young people (60-80%) will have participated in some form of formal or informal gambling by the age of 18, although evidence suggests that most engage in ‘softer’ forms of gambling such as lotteries, raffles, scratch tickets, and card games [Delfabbro et al., 2009; Derevensky, 2012; Purdie et al., 2011]. However, researchers have also drawn attention to the fact that research about young people’s gambling often predates the more pervasive forms of gambling that have entered gambling markets in the last decade, such as sports betting, and the saturation of promotions for these products, which are also aligned with valued
The current worldwide figures of gambling harm amongst young people has been inconsistent and difficult to measure. However current evidence suggests about one in 25 children in Australia will experience harms from gambling [Miller, 2017]. Another study found that 6.7% of Australian young people aged 12-18 years were classified as a problem gambler [Splevins et al., 2010]. Recent research from the United Kingdom found that there were 0.9% of young people aged 11-15 scoring at problem gambling levels and a further 1.1% at risk of developing problems [Gambling Commission, 2017]. It is important to note that although young people’s gambling harm rates are often much greater than adults, young people’s experiences of harm are measured in different ways compared to those of adults [Derevensky et al., 2003]. The health and social consequences of gambling harm for young people are similar to adults, and include impacts on mental health and wellbeing such as anxiety, depression, low self-esteem, and financial problems, along with harms associated with academic performance and attendance, and also relationship breakdown [Delfabbro and Thrupp, 2003; Hardoon and Derevensky, 2002]. While research has focused on the range of individual and social motivations for gambling [Delfabbro and Thrupp, 2003; Purdie et al., 2011; Thomas, 2014], there has been very limited research exploring the role of advertising in shaping young people’s attitudes towards gambling, and in particular sports betting [Derevensky et al., 2010; Felsher et al., 2004; Lambos et al., 2007; McMullan et al., 2012].

Prior to the emergence of sports betting and its associated promotions, research had predominantly explored children’s recall of gambling advertising, with a particular focus on lotteries, and the impact advertising appeal strategies have on young people’s gambling attitudes [Derevensky et al., 2010; Felsher et al., 2004; Lambos et al., 2007; McMullan et al., 2012]. Research demonstrated that most children recall seeing advertising for gambling products [Derevensky et al., 2010] and that certain appeal strategies within gambling advertisements, such as humour, bright colours, and the concept of winning, were influential in positively shaping children’s attitudes towards gambling [McMullan et al., 2012; Sklar and Derevensky, 2010]. What is less clear is how the advertising for newer gambling
products, such as sports betting, which are also linked to culturally valued activities such as sport, may influence how young people conceptualise gambling, and how it may shape children’s gambling attitudes, behaviours, and consumption intentions [Sproston et al., 2015; Thomas, 2014; Thomas et al., 2016]. The research presented in this thesis aims to address this gap.

1.3 Aim and research questions

The overall aim of this thesis was to explore the impact and influence of sports betting advertising on the attitudes, behaviours and gambling consumption intentions of young people.

Four broad questions were developed to guide the research:

1. What do young people recall from the advertising that they see from online bookmakers in different media and community environments?
2. How does sports betting advertising play a role in shaping the gambling attitudes and consumption intentions of young people?
3. What is the influence of the alignment between gambling and sport on the gambling attitudes, knowledge and consumption intentions of young people?
4. What are the range of public health strategies that may be used to respond to the influences of sports betting advertising on young people?

1.4 Theoretical lens: Consumer Socialisation Theory [Ward, 1974]

While the research presented in this thesis draws on a range of theories, and also aims to be theory generating, Consumer Socialisation Theory [Ward, 1974] was used to provide an overarching theoretical lens for the study and provided the rationale for the inclusion of young people aged 8-16 years. This theory will be described in more detail in Chapter Three, but in brief, it describes how young people receive information and make decisions about different products, how they
conceptualise the risks associated with these products, and the factors that may influence the decision making about engagement with products [Ward, 1974].

After reviewing a range of theories about how young people develop attitudes towards products, this theory was considered the best ‘fit’ for the studies presented in this thesis. It identifies that children of all ages are constantly learning and creating their own identity as consumers in the ‘market place’. Ekström [2006] noted the importance of understanding how children learn skills and develop an understanding of how to become consumers, in order for it to be used to influence children’s consumption intentions. This thesis aimed to understand what young people recall about sports betting advertisements, and how young people may be learning about sports betting from the messages within advertisements. John [1999] explains that children have different developmental stages that explain their ability to understand the messages that they see within advertising. Although not restrictive, these three stages: perceptual, analytical, and reflective, occur between the ages of 3-16 years.

This thesis is predominantly focused on children aged 8-16 years, as this age range captures both children in the later stages of their development (reflective stage) who will be transitioning into the legal gambling age of 18, and younger children who have been exposed to gambling advertising for most of their lives (analytical stage). Consumer Socialisation Theory was also relevant because it allowed an examination of the range of different socialising agents that may be influencing attitudes and consumption intentions, including the media, parents, and peers. The literature to date has generally proposed that gambling is an activity that is significantly influenced by parent and peer behaviours [Ennett et al., 2001; Hardoon and Derevensky, 2001; 2002]. However, given prevalence surveys that demonstrate that sports betting is primarily an activity that younger adults (under 35) participate in [Hare, 2015], this thesis aimed to identify if there was a range of other factors outside of parents and peers, such as advertising and the alignment of this product with other socially valued agencies such as sport, that may be influencing sports betting attitudes and consumption intentions.
The thesis specifically used Consumer Socialisation Theory to explore how the advertising of sports betting, and its alignment with sport, may shape young people’s attitudes towards gambling. Is there evidence that the media, including advertising, is playing a role as a ‘super peer’ through its strong influence on the attitudes of children towards this potentially harmful product [Strasburger, 2001]? To understand this influence, the studies presented in this thesis have explored young people’s specific interactions with advertising, including their brand recall and awareness, their recall of sports betting advertising in different environments, the impact of specific advertising strategies on their betting knowledge and consumption intentions, and the influence of the alignment of sports betting with sports celebrities, teams and codes on their attitudes and consumption intentions.

It is important to note that this thesis also uses Consumer Socialisation Theory to propose a range of public policy approaches to respond to the impact of advertising on young people. Ward [1974] reported the importance of understanding the different factors that are influencing children’s consumption intentions as valuable pieces of information that can be used in the development of public policy approaches. Ekström [2006] also asks if there are agencies or stakeholders that need to be accountable and actively need to be ensuring that consumers are better educated, and have a greater understanding of the marketplace. This thesis will reflect on the learning mechanisms that are occurring for young people and the socialising agents that may be having the most impact on these learning mechanisms, and will propose a range of public health strategies in response.

1.5 Conceptual framework

Figure One represents the conceptual framework for the thesis. The framework presents the aims and research questions, the overall theoretical lens, the four main studies used to answer these questions, the specific research questions associated with each study, and the corresponding academic publications.
Figure One: Conceptual framework

**Overall Research Aim:**
To explore the impact and influence of sports betting advertising on the attitudes, behaviours and gambling consumption intentions of young people.

<table>
<thead>
<tr>
<th>Study One: Understanding how adolescents and their parents conceptualise the relationship between gambling and sport.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method:</strong> Secondary data analysis of qualitative family interviews.</td>
</tr>
<tr>
<td><strong>Research Questions:</strong> 1. How do adolescents and their parents describe the relationship between gambling and sport? What factors may influence these perceptions? 2. How do adolescents interpret the messages they see about gambling during sport? 3. Is there evidence to suggest that young people are increasingly viewing sport through a 'gambling lens'?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Two: Strategies within sports betting advertising that may have specific appeal for young people.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method:</strong> A content analysis of 91 betting advertisements.</td>
</tr>
<tr>
<td><strong>Research Questions:</strong> 1. Is there evidence that sports betting advertisements contain promotional strategies that may specifically appeal to children? 2. What is the extent and nature of these strategies?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Three: The role of sport as a normalising and socialising agent for sports betting.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method:</strong> Community survey with parents and young people.</td>
</tr>
<tr>
<td><strong>Research Questions:</strong> 1. What is the extent to which young people and parents recall seeing sports betting promotions? 2. Where do they recall seeing these promotions? 3. Do young people specifically recall about sports betting promotions during sporting matches? 4. Do young people perceive that betting is being normalised as part of sport, and which factors do they describe as contributing to this?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Four: The influence of sports betting advertising on young people's attitudes, knowledge and consumption intentions.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method:</strong> Qualitative interviews with AFL fans aged 8-10 years.</td>
</tr>
<tr>
<td><strong>Research Questions:</strong> 1. Are there specific socialisation factors that may positively influence young people's understanding and perceptions of the popularity of specific gambling products? 2. Do some factors appear to be more influential than others in shaping young people's gambling attitudes and consumption intentions? 3. How can public health strategies be used to reduce the harms associated with socialising agents which are particularly influential in positively shaping young people's gambling attitudes and consumption intentions?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Publication 1: Initiation, influence, and impact: Adolescents and parents discuss the marketing of gambling products during Australian sporting matches.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publication 2:</strong> Do betting advertisements contain attention strategies that may appeal to children? An interpretative content analysis.</td>
</tr>
<tr>
<td><strong>Publication 3:</strong> &quot;It's just everywhere!&quot; Children and parents discuss the marketing of sports wagering in Australia.</td>
</tr>
<tr>
<td><strong>Publication 4:</strong> Factors that influence children's gambling attitudes and consumption intentions. Lessons for gambling harm prevention research, policy and advocacy.</td>
</tr>
<tr>
<td><strong>Publication 5:</strong> What do children observe and learn from televised sports betting advertisements? A qualitative study among Australian children.</td>
</tr>
</tbody>
</table>
1.6 Overview of the studies presented in the thesis

This thesis comprised four distinct studies and five peer reviewed publications. The following provides a brief description of each study, corresponding publications, the aims, methods, and the key findings and conclusions.

1.6.1 Study One: Understanding how adolescents and their parents conceptualise the relationship between gambling and sport


1.6.1.1 Aim and research questions

The aim of this study was to explore how adolescents and their parents described the processes, influences and impacts of the advertising of gambling within sport on the gambling beliefs and behaviours of young people. The study looked broadly at a range of gambling products advertised during Australian sport (including lotteries, casinos, horse racing, and sports betting). There were three research questions that guided the study:

1. How do adolescents and their parents describe the relationship between gambling and sport? What factors may influence these perceptions?
2. How do adolescents interpret the messages they see about gambling during sport?
3. Is there evidence to suggest that adolescents are increasingly viewing sport through a ‘gambling lens’?
1.6.1.2 Method

This paper involved a secondary data analysis of qualitative interviews, with 59 family groups consisting of 61 adolescents aged 14 to 18 years, and a parent. Given the very limited published literature on young people and gambling advertising, this secondary analysis was conducted to help shape and guide thinking about the subsequent studies in the thesis.

1.6.1.3 Findings

Some findings from this study were broadly similar to those in existing published research, including that adolescents perceived that gambling advertising made gambling seem easy, exciting and fun [Derevensky et al., 2010; Korn et al., 2005; Thomas, 2014; Wiebe and Falkowski-Ham, 2003]. However, new knowledge emerged. First, the study indicated that adolescents perceived that marketing practices specifically aimed to link gambling and sport together. Second, the study provided the first indication that there may be very specific advertising strategies (such as celebrity endorsement) that had a particular influence on positively shaping adolescents’ attitudes towards gambling. Finally, the study also provided evidence that gambling language was becoming embedded and normalised in adolescents’ discourses about sport. For example, parents and adolescents both discussed ‘odds talk’ to describe the outcomes of sporting matches.

1.6.1.4 Conclusions

The study developed new theoretical knowledge by concluding that there may be a socialising process occurring whereby the advertising of gambling during sporting matches initiated, influenced and impacted upon adolescents’ perceptions that gambling was a normal and valued part of sport. The study highlighted the specific role that a comprehensive public health approach could play in responding to the potential harms associated with the advertising of gambling on young people, and recommended the need to consider the historical templates from tobacco and other areas of public health, in responding to the impact of gambling advertising on young people.
1.6.2 Study Two: Strategies within sports betting advertising that may have specific appeal for young people


1.6.2.1 Aim and research questions

Given the findings from Study One, that certain advertising strategies used by the gambling industry may have an additional appeal for adolescents, this study conducted a content analysis to identify the extent and nature of attention strategies within betting advertisements in Australia. The study aimed to identify whether advertising strategies that were identified in tobacco, alcohol, and gambling research as having a specific appeal to young people were also evident in betting advertisements. The study was guided by two research questions:

1. Is there evidence that sports betting advertisements contain promotional strategies that may specifically appeal to children?
2. What is the extent and nature of these strategies?

1.6.2.2 Method

An interpretative content analysis [Elo and Kyngäs, 2008] was used to explore betting advertisements from Australian online bookmakers. A coding framework of 16 attention strategies was developed based on research studies in tobacco [Arnett and Terhanian, 1998; Difranza et al., 1991], alcohol [Chen et al., 2005; Fielder et al., 2009; Gunter et al., 2008; Hastings et al., 2010; Nash et al., 2009; Waiters et al., 2001] and gambling [Derevensky et al., 2011; Derevensky and Gupta, 2007; Korn et al., 2005; McMullan et al., 2012; Pitt et al., 2016; Pitt et al., 2017]. This template was then applied to 91 betting advertisements that were aired during 2008-2015, from 11 different online bookmakers.
1.6.2.3 Findings

The study identified that there were a range of specific strategies within the advertisements that may have a particular appeal for young people. Attention strategies were identified 688 times, with on average 7.6 attention strategies per advertisement. Key strategies included the use of music (n=80, 87.9%), voiceovers (n=79, 86.8%), catchy slogans (n=78, 85.7%), and humour (n=49, 53.8%). However, there were also some strategies that were unique to betting advertisements, in particular the use of technology (n=55, 60.4%), and the use of risk reducing techniques (n=18, 19.8%) including ‘cash out’, ‘money back’ and ‘refund’ offers.

1.6.2.4 Conclusions

This study found evidence that sports betting advertisements contained promotional strategies that may specifically appeal to children. It recommended that governments should consider further restrictions to the content and timing of sports betting advertisements. This study also demonstrated the need to provide empirical evidence to determine whether some strategies had more impact on young people than others, and may be contributing to positive attitudes towards betting products.

1.6.3 Study Three: The role of sport as a normalising and socialising agent for sports betting

1.6.3.1 Aims and research questions

Given the findings from Study One and Two, this study investigated how young people and their parents or primary caregivers who actively participated in or watched sport recalled promotions for online bookmakers. The study was also used to propose a theoretical model, which could explain how children’s exposure to sports betting advertising may positively influence their future gambling consumption attitudes and behaviours. The study was guided by four research questions:

1. What is the extent to which young people and their parents recall seeing sports betting promotions?
2. Where do they recall seeing these promotions?
3. What do they specifically recall about sports betting promotions during sporting matches?
4. Do children perceive that betting is being normalised as part of sport, and which factors do they describe as contributing to this?

1.6.3.2 Method

In this study 152 families (young people aged 8-16 years and a parent) were surveyed in New South Wales (NSW) and Victoria, at junior and professional Australian Football League (AFL), National Rugby League (NRL), and soccer events. This study tested not only if strategies that appeal to children were evident in their recall of advertisements, but also where children were seeing this advertising in their environment. This study developed and used a range of child friendly methods for data collection, including the use of picture boards, and child friendly language about gambling. A picture board which contained 12 different environments including television, sporting stadium, media devices, on billboards and radio, was provided to select where they had seen or heard sports betting advertisements. Participants were asked about their sports viewing frequency, and what they could recall about the sports betting advertisements that they had seen specifically during sport. Finally, participants were asked if and why they thought sports betting was a normal or common part of sport.
1.6.3.3 Findings

This study had a number of important findings. The first was that over 90% of young people (n=139, 91.4%) and 98% of parents (n=149, 98.0%) could remember ever seeing an advertisement for sports betting. Young people from AFL or NRL recruitment sites were significantly more likely to have seen an advertisement compared to children recruited from soccer. Young people could also remember sports betting brand names, the placement and volume of sports betting advertising during sport, plot lines, and in some instances, the deals and promotions within the advertisements. Secondly, the four environments in which young people had most commonly seen sports betting advertising were television (n=135, 97.1%), at sporting stadiums (n=105, 75.5%), radio (n=69, 49.6), and on websites (n=64, 46.0%). This was similar for adults, television (n=144, 96.6%), at sporting stadiums (n=92, 61.7%), websites (n=68, 45.6%) and newspapers (n=66, 44.3%). Lastly, 75% of young people and 90% of parents thought betting was a normal or common part of sport. Young people in particular thought that sports betting was normal because of the amount and frequency of advertising that they had seen. The evidence from this study was used to propose a shaping pathway, which aimed to demonstrate the way engagement in sport and young people’s exposure and recall of sports betting advertising may be contributing to how young people learn and develop consumption intentions towards gambling.

1.6.3.4 Conclusions

The study recommended that sporting organisations should reconsider their relationships with online bookmakers, while governments should consider regulations that address the placement, quantity and content of sports betting advertising, to ensure children’s exposure to this product is reduced.
1.6.4 Study Four: The influence of sports betting advertising on young people’s attitudes, knowledge and consumption intentions

1.6.4.1 Overall study aims

This study (comprised of two publications) aimed to identify how different socialisation factors such as the media, family and peers may be influencing young people’s gambling consumption intentions. This study also aimed to explore whether specific sports betting promotional techniques in sports betting advertising may be influencing young people’s technical knowledge of gambling.

1.6.4.2 Overall study method

Study Four included face-to-face qualitative interviews with 48 young people aged 8-16 years. A semi-structured interview format was used to explore young people’s gambling attitudes, gambling behaviours, current and/or future gambling consumption intentions and sports betting advertising recall. This study incorporated child friendly interviewing techniques such as the use of picture boards to prompt or engage children in discussions. There were two resulting peer reviewed publications that were produced from Study Four.


1.6.4.3 Publication Four aims and research questions

Publication Four aimed to understand how a range of consumer socialisation agents: media, family and peers, may shape children’s gambling attitudes and
consumption intentions. It was guided by three research questions:

1. Are there specific socialisation factors that may positively influence young people’s understanding and perceptions of the popularity of specific gambling products?
2. Do some factors appear to be more influential than others in shaping young people’s gambling attitudes and consumption intentions?
3. How can public health strategies be used to reduce the harms associated with socialising agents which are particularly influential in positively shaping young people’s gambling attitudes and consumption intentions?

1.6.4.4 Publication Four findings

This publication had three key findings. The first was that young people believed sports betting was the most popular form of gambling, compared to other products. Second, young people who had gambled did so with family members, and this gambling was often based around culturally valued events such as horse racing. Third, over two thirds of young people (66.7.3%) indicated a desire to try gambling either now or in the future, with 35% selecting sports betting as the product they would most like to try.

1.6.4.5 Publication Four conclusions

The publication concluded that while there were a range of socialisation factors that influenced young people’s gambling attitudes and consumption intentions, advertising and the alignment of advertising with sport, appeared to have the most impact. The publication recommended a range of harm reduction strategies that emphasised a public health approach to gambling harm. These included regulatory actions on the content and placement of sports betting advertisements, and evidence based education for young people and parents about the risks of gambling, in particular newer forms of gambling such as sports betting.

1.6.4.6 Publication Five aim and research questions

Publication Five was designed to understand how sports betting advertising may be influencing young people’s technical knowledge about sports betting. It aimed to explore how advertising processes influence young people’s desires to reproduce sports betting behaviours, and their specific knowledge about the technical aspects of betting. This publication was guided by four research questions:

1. To what extent do young people recall specific appeal strategies within advertisements, and are they able to distinguish promotions used by different brands?
2. Are there factors within advertising that may create an exaggerated perception that sports betting is a common or normal activity for sports fans?
3. Does advertising influence young people’s technical knowledge about betting?
4. Are there specific factors relating to advertising which may influence young people’s willingness to engage in betting on sport?

1.6.4.7 Publication Five findings

This publication had three key findings. The first was that young people had very specific recall of some advertising strategies such as humour, characters, voiceovers, and risk reducing promotions. Second, these strategies had an impact on children’s perceptions of the risks associated with gambling on sport and the normalisation of gambling. Third, young people had technical knowledge about
sports betting such as how someone would place a bet, the different betting markets available and betting terminology. Some young people indicated that they were learning this information through the messages that they had seen within advertisements.

1.6.4.8 Publication Five conclusions

The study then concluded that a process of observational learning may be occurring whereby young people are receiving information and learning about gambling from sports betting advertisements. It concluded that governments should consider implementing regulations that would ensure children are protected from these potentially misleading and harmful advertisements, and provide educational campaigns to teach young people about the industry tactics that may be contributing to a reduced perception of risk.

1.7 Significance of the thesis

Given the limited research that has explored the impact of sports betting advertising on young people, the results from this thesis have aimed to increase the evidence base around the following four key gaps in the literature:

1. The extent to which young people, especially younger children recall advertising within different environments.
2. How specific strategies within sports betting advertising may be influencing young people’s perceptions and attitudes towards gambling.
3. The influence of the alignment of gambling within culturally valued events such as sport.
4. How young people may be learning about sports betting from the advertisements that they have seen.

The results presented in this thesis have outlined the need for a comprehensive public health approach to reducing the influence of sports betting advertising on young people’s attitudes, behaviours and consumption intentions. The role
of three key public health strategies was highlighted within the discussion of thesis findings:

1. The essential role of strong regulatory frameworks which restrict and reduce young people’s exposure to gambling promotions. The research from this thesis has highlighted three recommendations in relation to regulation. First are regulations which restrict the timing of sports betting advertising during children’s viewing hours, and during live sports events. Second are regulations which restrict sports betting advertising in community environments, including at sporting venues. Lastly, there needs to be further consideration relating to regulatory frameworks regarding the content of sports betting advertising and the strategies which may have a specific appeal for young people.

2. The role of education programs and campaigns that are developed independently of the gambling industry. The results from this thesis have provided evidence for education and media campaigns that emphasise messages about the harms associated with specific gambling products instead of current campaigns that focus on ‘responsible behaviours’. The inclusion of young people’s attitudes within the design and development of advertising campaigns was also a recommended strategy as part of a comprehensive public health approach.

3. The role of sporting codes and related community organisations in strategies which aim to prevent and reduce young people’s exposure to gambling advertising. The findings in this thesis demonstrate the influence sport has on the development of young people’s attitudes towards gambling products. It is important that sporting codes take responsibility for their current relationships with gambling companies and ensure that they are committed to reducing young people’s exposure to gambling products.

1.8 Chapter summary

This chapter has provided an overview of the main chapters in this thesis. It has provided a brief overview of the literature that demonstrates the expansion of
sports betting in Australia and the increase in consumption, the existing research
gaps in relation to young people and sports betting, the theoretical lens used to
guide the research, the aims, research questions and methods used in the thesis,
and the significance of the thesis. The following chapter will outline in more detail
the literature that has been used to guide the thesis.
Chapter 2. Literature Review

2.1 Chapter overview

This chapter begins with an overview of the conceptual approach used in this study – gambling harm from a public health perspective, with particular emphasis on the role of the gambling industry as the key ‘vector’ of harm. The chapter then provides a background for the thesis by describing the socio-cultural and historical context of gambling in Australia, and the regulatory frameworks associated with the liberalisation of gambling in Australia. Given the focus of this thesis on sports betting, the chapter provides an overview of the Australian legislation associated with the advertising of sports betting, and the increased consumption of sports betting products. Finally the chapter reviews the evidence relating to young people and gambling, and the influence of advertising on young people.

2.2 Understanding gambling harm in Australia: A public health approach

2.2.1 Public health approaches to gambling research and policy: shifting to a focus on the commercial determinants of gambling harm

In 2016, an opinion piece in the New York Times about gambling in Australia was accompanied by the headline “Australia has a serious gambling problem” [O'Shea, 2016]. Australians lose on average more money per person on gambling than anywhere else in the world, with an estimated $990 per person spent in 2016 and a figure 40% higher than second place Singapore [The Economist, 2017]. In 2015, there were approximately 6.1 million regular gamblers in Australia, with 1.1 million of these gambling in ways that caused or put them at risk of gambling problems [Armstrong and Carroll, 2017]. Studies have estimated that for every person who has experienced a problem with gambling, between 5-17 others may be negatively impacted [Australian Productivity Commission, 2010; Goodwin et al., 2017; Holdsworth et al., 2013]. The term ‘gambling harm’ has been used to
describe the range of ways that gambling can impact on individuals and communities, and has been defined as:

“Any initial or exacerbated adverse consequence due to an engagement with gambling that leads to a decrement to the health or wellbeing of an individual, family unit, community or population” [Langham et al., 2016, p.4].

Although many people associate harmful gambling with negative financial impacts, there are many other negative health and social consequences that signal that gambling is a serious public health concern [The Lancet, 2017]. These include negative impacts on health such as depression, anxiety, and suicide, and social issues such as impact on employment, homelessness, relationship breakdown, and criminal activity [Browne et al., 2016; Holdsworth et al., 2013; Martin et al., 2014; Seymour, 2003; Suomi et al., 2013]. People who have been impacted by the gambling behaviours of others report marriage and relationship breakdown, financial hardship and stress, and anxiety and depression [Holdsworth et al., 2013; Kalischuk et al., 2006; Suomi et al., 2013]. The social costs of gambling have been estimated at about $4.7 billion [Australian Productivity Commission, 2010], with some researchers arguing that a disproportionate amount of these costs are associated with low and moderate risk gambling [Browne et al., 2016].

While public health approaches have been core to reducing and preventing population level harms from unhealthy commodity industries such as tobacco and alcohol, these approaches played a very limited role in gambling harm reduction and prevention until the late 1990s. This may be partly due to the relatively recent commercialisation of high intensity gambling products [Adams et al., 2009], but also because of the application of addiction research frameworks [Blaszczynski et al., 2004], which have until recently, dominated research and policy approaches to understanding the treatment and minimisation of problem gambling [Miller and Thomas, 2017]. These frameworks, such as the Reno Model of Responsible Gambling [Blaszczynski et al., 2004], place the emphasis on individual responsibility for harm minimisation, rather than broader structural issues (including the role of the gambling industry and political decision making) on the
prevention and reduction of harm [Hancock and Smith, 2017; Reith, 2012; Reith, 2013].

It was not until 1999 that the first substantial commentary on a public health approach to gambling appeared in the academic literature. Korn and Shaffer [1999] argued that given an “unprecedented expansion of legalised gambling” [p. 289], increases in problem and pathological gambling in adults, and sustained high rates of problem gambling in young people, a public health approach was needed. This approach included: a) increased awareness amongst the health sector about gambling; b) developing a framework to guide the study of gambling from population, human ecology and addictive behaviour perspectives; c) outlining how gambling could impact individuals, families and communities; and d) using the Ottawa Charter for Health Promotion1 [World Health Organisation, 2017] to minimise the negative impacts of gambling, and “appreciate its potential benefits” [p.290]. Korn [2001] went on to note that the key ‘public health goals’ for gambling were to prevent gambling related problems, particularly in ‘at risk’ populations; promote informed attitudes, behaviours and policies towards gambling; and protect vulnerable adults (with specific mention of young people) from gambling related harm. However, there was limited acknowledgement of how population based approaches could contribute to these goals, and particularly the role of the gambling industry as the key vector of gambling related harm.

It was not until 2004, when writing about efforts to prevent harmful gambling in young people, that Messerlian and colleagues [2004b] described a more comprehensive approach to the prevention of gambling harm. This approach included limiting the legal age for gambling, reducing exposure to gambling products, and advocating for a suite of policy changes aimed at regulating and limiting the expansion of gambling in communities [Messerlian et al., 2004b]. While the gambling industry was not directly mentioned as one of the key influencers on gambling behaviour, Messerlian and colleagues [2004b] linked their public health goals in relation to young people and gambling - denormalisation,

---

1 The Ottawa Charter was developed as an action plan to achieve Health for All by the year 2000 and beyond. It is a charter that has five key action areas of health promotion, and three basic health promotion strategies.
prevention, protection, and harm reduction - to those strategies incorporated in tobacco control policies. This included highlighting the advertising strategies employed by the gambling industry and their potential impacts on young people. At roughly the same time, national policy initiatives in Australia were also starting to recognise the need for a public health approach to gambling. In 1999 the Australian Productivity Commission compared gambling to other public health concerns such as tobacco and alcohol, noting that it was “the continuum of impacts and costs that problem gamblers could impose on others that defined it as a public health issue” [Australian Productivity Commission, 1999, p. 43]. However, the Productivity Commission [1999] also recognised that the range of people who experienced the negative consequences of gambling, but who did not require individual intervention, were also of concern for public health reasons. This was one of the first signals that ‘gambling harm’ rather than ‘problem gambling’ should be the focus of public health initiatives, policies, and prevention activities. In 2010 the Productivity Commission [2010] recommended that all states and territories should consider a public health approach to gambling, again highlighting the need to shift from a focus on individual behaviour towards understanding the role of gambling products in gambling harm:

“The problems experienced by gamblers are as much a consequence of the technology of the games, their accessibility and the nature and conduct of venues, as they are a consequence of the traits of the gamblers themselves. This suggests that addressing the difficulties faced by gamblers should draw from the insights of consumer policy and public health policy, not from medical perspectives alone.” [Australian Productivity Commission, 2010, p. 21]

Despite the clear focus of both the 1999 and 2010 Australian Productivity Commission reports that regulations targeting gambling products, promotions and industries were key to public health responses, the role of the industry in the development of harm has received very limited focus from either researchers, or policy makers. It is perhaps telling that the chair of the Australian Productivity Commission, Gary Banks, commented that while the Productivity Report
stimulated research and policy, very little of this had been directed where it was “likely to do most good” [Banks, 2011, p. 5].

One of the reasons for this may be the role of the gambling industry in the generation of harm, and in particular, the lack of willingness of governments to address and restrict the tactics used by the industry to promote their products and resist regulatory reform [Thomas et al., 2018b]. While there has clearly been a recognition since the Productivity Commission report that a broad range of factors may influence harmful gambling in population sub-groups, subsequent definitions of gambling harm have been restricted to the impact of individual, socio-cultural, environmental factors of harm, with the impact of commercial, policy or political factors missing from definitions. For example, Browne and colleagues [2016] define a public health approach to gambling harm as consisting of a framework of different determinants which:

“…. acknowledges and captures the impact of broad features of society such as policy, social cohesion, culture, education, and life-course on health behaviours (such as gambling) and subsequently health outcomes (such as harm).” [Browne et al., 2016, p. 10]

The Victorian Responsible Gambling Foundation [2015b], a statutory authority created by the Victorian Parliament in Australia specifically to address the challenge of gambling harm in the Victorian community also states that the aim of a public health approach to the reduction and prevention of gambling harm is to:

“…address health inequalities by tackling the range of factors that impact on health beyond the individual level of lifestyle choice. These include social, economic and environmental factors.” [Victorian Responsible Gambling Foundation, 2015a, p. 6].

Similarly, conceptual frameworks aimed at addressing gambling harm have continued to focus on responsible choices. For example, whilst developing one of the most advanced conceptual frameworks relating to the prevention and reduction
of gambling harm, Abbott and colleagues [2015] still revert back to balanced choices, and individual responsibility:

“…to guide public policy by preventing or reducing harm; promoting balanced and responsible choices; and protecting vulnerable and at-risk populations.” [Abbott et al., 2015, p. 76]

However, some researchers have recognised that the commercial and political determinants of gambling harm must be considered in any public health approach to gambling harm reduction and prevention [Reith, 2012]. Adams and colleagues [2009] observe that public health approaches to gambling must aim to develop interventions that “stem the rises in gambling consumption that drive harm” by shifting the focus from individual behaviours, to the contexts and environments that drive those behaviours [p. 689]. They specifically describe the need to use policy and regulation to change consumption environments, the nature of the product, and the views that influence consumption practices and intentions (including advertising bans). Further justification for including industry tactics as a key determinant of public health approaches to gambling come from studies which have mapped the tactics of the gambling industry onto those identified in tobacco and junk food. These studies have demonstrated that the ‘playbook’ associated with the gambling industry’s efforts to promote its products and prevent regulatory reform is broadly similar to the key strategies of other unhealthy commodity industries, particularly in relation to product marketing strategies [Thomas et al., 2018b]. Finally, studies have recognised that commercial and political determinants are key factors to consider in public health initiatives which seek to understand both the normalisation, and denormalisation of gambling. Thomas and colleagues [2018a] use a public health framework to describe the normalisation of gambling as:

“The interplay of socio-cultural, environmental, commercial and political processes which influence how different gambling activities and products are made available and accessible, encourage recent and regular use, and become an accepted part of everyday life for
individuals, their families, and communities.” [Thomas et al., 2018a, p. 6]

This definition is particularly important in considering the range of strategies that may shape young people’s attitudes towards gambling, and public health efforts to respond, but also that efforts to inform good public health policies will be met by challenges from industry. As Banks [2011] describes, gambling:

“…not only faces all the difficulties of an evidence-based approach that are inherent to social policy, it also faces the political difficulties that stem from strong vested interests. It is hard to think of another area of social policy where this combination of obstacles is so marked.” [Banks, 2011, p. 8]

As will be demonstrated throughout this thesis, the challenges facing public health researchers in the area of gambling are limited to not only the production of robust and policy relevant evidence, but the willingness of politicians and policy makers to challenge and respond to this evidence. As Cassidy and colleagues [2013] commented in Fair Game, researching gambling is “a complex and politicised activity” [p. 8]. This proves to be a difficult environment to work within due to the large revenue that gambling provides to governments. There appears to be a clear tension between governments providing evidence based policy decisions and regulations to reduce the consumption of a product that also contributes significantly to taxation revenue. For example, in 2015-16 the total state government revenue from gambling was almost $6 billion, with the majority of this coming from gaming products including EGMs (over $2 billion) [Queensland Government Statistician's Office and Queensland Treasury, 2017]. This may also explain why in gambling very little research has explored the commercial and political determinants of harm.
2.3 Sports betting in Australia

2.3.1 The liberalisation of sports betting in Australia

The Victorian Responsible Gambling Foundation [2013] defines sports betting as:

“A term used to cover a wide range of wagers on the outcomes of events, or events that occur within larger events.” [Victorian Responsible Gambling Foundation, 2013, p. 1]

Betting on sports was an illegal activity in Australia until the 1980s, although informal betting on boxing, cricket and football was a popular activity [Australian Institute for Gambling Research, 1999]. While some betting on Australian Rules Football via the TAB was legalised in the 1980s in Victoria and Tasmania (known as the FootyTAB), it was the legalisation of internet based sports betting by the government of the Northern Territory that led to the first online bookmaker registered in Australia (Centrebet in 1996) [Williams and Wood, 2007], the subsequent legalisation of online sports betting services in other Australian states and territories, and the proliferation of corporate online bookmakers that are evident in Australia today.

The provision of sports betting services in Australia changed substantially after 2008, when the betting exchange Betfair Pty Limited successfully challenged the Western Australian (WA) government in the Australian High Court. The case began due to amendments made by the WA government to the Betting Control Act 1954 [Oreb, 2009]. These amendments restricted Western Australians from gambling using a betting exchange, a process where opposing bets are matched against each other (for example a horse winning or losing), resulting in the company gaining a small commission from winning transactions, and ensuring that WA races could only be promoted as a market if approved by the government [Oreb, 2009]. Betfair Pty Limited did not obtain approval to operate in WA, and so believed that they were being unfairly disadvantaged. The High Court overturned the original amendments made by the WA government, stating that there was an
advantage given to other corporate bookmakers in WA. It therefore allowed a company to be registered in one state or territory and provide markets on events across other states and territories [Oreb, 2009]. This decision has been seen as having the biggest influence over the commercialisation of the sports betting industry, with dramatic increases in advertising and interest from overseas companies [Horn, 2011].

It is important for readers of this thesis to note that there is no federal (or national) government registration of online bookmakers in Australia. Most bookmakers are registered in the Northern Territory where there are significant caps on taxation, and fewer restrictions about how online bookmakers are able to offer and promote their products as compared to other states and territories. For example, the *Northern Territory Racing and Betting Act 2017*, details that online bookmakers will be taxed 10% of their profits (after payouts), with the tax rate capped at $500,000 each financial year since 2014 [Department of the Attorney-General and Justice, 2017]. As the taxation cap increased from $250,000 (prior to 2014) to $500,000 [Barnes et al., 2017], there has been a call for politicians to increase the amount of tax that bookmakers need to pay especially because of the burden of harm associated with gambling on state government resources [Livingstone, 2017].

At the time of writing this thesis there were 27 registered corporate bookmakers in Australia, of which 21 were based in the Northern Territory [Department of the Attorney-General and Justice, 2017]. In 2014 it was estimated that there were over 90,000 different national and international sporting and racing events that could be the subject of betting [Rothfield, 2014]. While the primary market of most online corporate bookmakers is offering financial wagers on sporting events or components within sports, for example the final score, points margin, and first goal scorer, they also offer markets on horse races, and more non-traditional ‘novelty’ bets, including markets on current affairs, politics, awards ceremonies, and reality television show winners.
2.3.2 Participation in sports betting: prevalence and harm

While sports betting participation and expenditure may not be as high for other gambling products such as EGMs or casino gambling, it is the fastest growing form of gambling in terms of expenditure [Queensland Government Statistician's Office and Queensland Treasury, 2017]. In 2015-16, sports betting expenditure in Australia was approximately $920 million. This was a 13% increase from the previous year (2014-15) and the largest increase of any gambling product [Queensland Government Statistician's Office and Queensland Treasury, 2017]. This compares to EGMs (over $12 billion, 4.2% increase), casino gambling (over $5 billion, 0.4% increase), and racing (over $2 billion, 4.1% increase) [Queensland Government Statistician's Office and Queensland Treasury, 2017]. When examining sports betting participation and expenditure from an individual level, the Queensland Government Statistician’s Office reported an average spend of $49.55 per capita on sports betting products [Queensland Government Statistician's Office and Queensland Treasury, 2017].

At a state level, in 2015-16 approximately $280 million was spent in the state of Victoria on sports betting, an increase of 8.2% and a per capita spend of $59.87, the largest amount in any state or territory except for the Northern Territory ($2102 per capita) [Queensland Government Statistician's Office and Queensland Treasury, 2017]. The Victorian Gambling Prevalence Survey (conducted in 2014) found that 4.82% of Victorians participated in sports betting in the past 12 months, via online sites (over 50%), at a TAB (44.9%), or at a pub or hotel (22%) [Hare, 2015]. In 2015-16, over $151 million was spent on sports betting in NSW ($25.49 per capita) [Queensland Government Statistician's Office and Queensland Treasury, 2017]. A 2011 gambling survey conducted in NSW, found that 7% spent money on sports betting in the previous 12 months either at a TAB (63%) or via online sites (35%) [Sproston et al., 2012]. However this data was collected before online forms of sports betting were more commonly available.
2.4 The promotion of online sports betting

2.4.1 The regulatory environment for the promotion of sports betting

While the advertising of some forms of gambling such as EGMs has been significantly restricted in Australia [Greene, 2010; Victorian Government, 2015], there are comparatively few regulatory restrictions in relation to the advertising of sports betting [Department of Communications and the Arts, 2016]. This includes the limited regulation on how betting is promoted in both traditional (such as television) and new advertising channels (such as social media) [Thomas et al., 2015]. Instead, regulation of gambling advertising at the Federal level takes a broad approach to the content of gambling promotions. Betting advertisements shown on commercial television are required to adhere to the Commercial Television Industry Code of Practice (subsequently referred to as ‘the Code’) [Australian Communication and Media Authority (ACMA), 2016]. Directives in the Code about the content of gambling advertisements have been criticised for lacking detail and for containing significant loopholes which may lead young people to be exposed to gambling advertising [Hickman and Bennett, 2016; Stark, 2015]. The Code broadly states that gambling advertising cannot be directed at children, show children participating in gambling or depict gambling as a family activity, and must be socially responsible [ACMA, 2016]. However there are two key ‘gaps’ in provisions within the Code. First, the Code does little to address factors in television-based gambling advertisements that research shows may be highly appealing to young people – such as the use of sporting celebrities, cartoons, or advertisements that make betting appear ‘risk free’ [Thomas et al., 2015]. Second, while the Code restricts gambling television advertisements from being promoted in ‘G’ rated time slots, gambling advertisements can be shown if they are within a sporting program, sports match, or news or current affair show [ACMA, 2016]. Community members and researchers have been concerned that these loopholes mean that young people, who are a significant part of the audiences for sporting matches, are unnecessarily exposed to sports betting promotions that are designed for adult audiences [Carroll, 2015; Stark, 2015; Thomas et al., 2012]. In 2015, the Code was relaxed even further when the time
period for children’s viewing hours was reduced from 4:00pm -7:30pm to 4:00pm-7:00pm, enabling gambling providers to promote their products half an hour earlier [ACMA, 2016].

In 2016, the advertising industry, through the Australian Association of National Advertisers (AANA), introduced a self-regulatory industry Code for the promotion of betting products and services [Australian Association of National Advertisers (AANA), 2016b]. The AANA Code was developed largely in response to public criticism about the content of betting advertisements [Bennett and Hickman, 2016]. While self-regulatory Codes have been shown to be ineffective in reducing the harms caused by industries such as tobacco, alcohol and junk food [Jernigan, 2010; Moodie et al., 2013], the AANA [2016a] states that “self-regulation represents industry adopting a responsibility to the consumer and demonstrating to regulators a result in ethical communications”. One provision in the AANA Code directly relates to the appearance of children within gambling advertising, stating that betting advertising must not “depict a person who is a minor unless the person is shown in an incidental role in a natural situation and where there is no implication they will engage in betting activities”, while another provision prohibits the use of “theme, visuals and language that may be directed primarily to minors” [AANA, 2016b]. The AANA and its Code have been criticised for its lack of independence, with researchers arguing that independent bodies should develop such Codes without vested interests in the industry, and with clear enforceable penalties for those who violate such codes [Daube et al., 2016].

The outcome of the Productivity Commission Inquiry [2010] identified the need to understand the effects of the online environment and increasing opportunities to gamble. This led to the 2011 Joint Select Committee Inquiry into ‘Interactive and Online Gambling and Gambling Advertising’ [Parliamentary Joint Select Committee on Gambling Reform, 2011]. The Inquiry concluded that there was little knowledge surrounding the promotion and advertising of gambling products particularly in sport and the impacts of this advertising on young people. This resulted in the Joint Select Committee into ‘Advertising and Promotion of Gambling Services during Sport’ in 2013 [Parliamentary Joint Select Committee on Gambling Reform, 2013]. As a result of this inquiry there were small changes
made to regulations, such as the prohibition of live odds from betting company spokespeople on the ground of sporting events and the banning of live odds announcements within the game. However one of the major conclusions from this inquiry was that more research was needed into the impact of sports betting advertising, especially on young people.

In October 2017, the Federal Government proposed the Broadcast and Content Reform Package, which included specific reform relating to gambling advertising. This proposed a ban to gambling advertising within live sporting broadcasts on free to air and subscription television, five minutes before the game and after the final siren, and between 5am and 8:30pm [Department of Communication and the Arts, 2017b]. The Government reported that the reforms were due to the “community concern that regular exposure to gambling advisements during live sport could normalise gambling in the eyes of children” [Department of Communication and the Arts, 2017b]. As of December 2017, the Government announced that these reforms would be implemented in March 2018 [Department of Communication and the Arts, 2017a].

2.4.2 Advertising spend and trends: the alignment with sport

In Australia, the most discussed aspect of sports betting has related to advertising. The amount of money spent on gambling advertising has increased 160% from 2011 to 2015 according to Standard Media Index figures [Hickman and Bennett, 2016]. In 2015, the gambling industry spent $147 million on advertising - the fourth highest of all advertisers in Australia, with the majority believed to be from online bookmakers [Schetzer, 2015]. A report from 2017 has suggested that online bookmakers spend approximately $120-$150 million a year on television advertising alone [Mason, 2017]. Hickman and Bennett [2016] reported that some online bookmakers spend more money on gambling promotions than others, with Irish-owned online bookmark Sportsbet holding over 30% of the marketing spend, followed by Crownbet (18%), William Hill (15%), and Ladbroke (13%). Another media report suggested that in 2015 Sportsbet spent $77 million on advertising in Australia [Cummins, 2016].
Online bookmakers currently have large sponsorship deals with sporting codes and teams. The National Rugby League (NRL) has an estimated $60 million contract over five years with online bookmaker Sportsbet [Canning, 2016]; in 2016, teams such as the Brisbane Broncos (William Hill) [Badel, 2011] and the Gold Coast Titans (Ladbrokes) [Greenwood, 2016] had online bookmakers as jersey sponsors; and the CEO and owner of online bookmaker Crownbet is a director of the Melbourne Storm (which also has Crown Resorts as a major sponsor) [Pengilly, 2017]. While teams from the Australian Football League (AFL) have begun to take measures to reduce their sponsorship relationships with sports betting companies by signing the Victorian Responsible Gambling Foundation charter [Burgan, 2016], the AFL as a code has signed a five year deal with Crownbet worth approximately $50 million [Gardner, 2014]. Researchers argue that this embedding of gambling promotions in sport (with upwards of 110 episodes of gambling advertising per match) [Lindsay et al., 2013; Thomas et al., 2012] is a key step in ‘normalising’ sports betting as an integral part of the sports fan experience for young people and young men [Thomas, 2014]. In 2016, William Hill became the first bookmaker to be the official sponsor of the Australian Tennis Open. Reports suggested that William Hill saw a 200% increase in turnover, and signed up approximately 14,000 new customers across the two week period of the 2016 Australian Open [Rolfe, 2016]. Demonstrating the effectiveness of sports sponsorship by online bookmakers, almost 75% of new customers went on to bet on other products through William Hill [Rolfe, 2016].

2.4.3 Strategies within sports betting advertisements

Studies have investigated the content of sports betting advertising. Deans and colleagues [2016] explored the content of Australian sports betting television advertisements. The study demonstrated that there were a number of reoccurring themes that were present within sports betting advertisements. The most commonly presented theme was sports fan rituals and behaviours, followed by ‘mateship’ and peer bonding. The study concluded that processes of ‘symbolic consumption’, including how advertisements create different meanings around the engagement with gambling, may be influential in young men’s acceptance and uptake of sports betting products, particularly if they are fans of sport.
Internationally, a content analysis by Lopez-Gonzalez and colleagues [2017] explored 135 sports betting advertisements from England and Spain, to identify how sports betting was being portrayed by online bookmakers. This study found that almost all betting advertisements featured males, and demonstrated betting on mobile phones. Over half of advertisements showed people betting while watching sport, and over a third promoted a sign up offer such as free bets or refunds.

While research initially looked at the general content of sports betting advertisements, more recent research has aimed to explore the use of more specific advertising strategies, such as inducements and incentives. For example, a study by Hing and colleagues [2015] investigated the range of inducements promoted on bookmakers’ websites. They found that there were over 200 instances of inducements over a four-week period, and 15 different types of inducements were identified. These included refunds, bonus bets, sign up offers, multi-bets and odds promotions. In the United Kingdom, Newall [2015] examined televised and betting shop front promotions during the 2014 Soccer World Cup. He found that many of the promotions advertised were for complex bets, which had a high probability of expected losses compared to simpler bets with lower expected losses. Newall [2015] concluded that bookmakers may be using these promotions to ‘nudge’ people into betting on aspects of the game that have a greater level of risk.

2.5 Young people and gambling

2.5.1 Prevalence of gambling in young people

In Australia, it is illegal for young people to participate in formal gambling before they are 18 years old. Research shows that approximately 60% of Australian young people have gambled formally or informally before 18 years, with figures estimated to be as high as 80% [Delfabbro et al., 2005b; Delfabbro et al., 2014]. Delfabbro and colleagues [2005b], conducted a survey in the Australian Capital Territory (ACT) with over 900 students, and found that over 70% had gambled in their life-time but almost 10% had gambled in the past week. Another study
conducted in South Australia in 2011, found similar results whereby 11% of the young people who gambled did so on at least a weekly basis [Delfabbro et al., 2014]. These findings are consistent with international research which shows 60-80% had gambled [Derevensky et al., 2011; Derevensky and Gupta, 2007; Derevensky, 2012; Derevensky and Gilbeau, 2015; Volberg et al., 2010]. Young people report gambling on a range of products including card games, raffles, sports, lotteries and tipping competitions [Boldero et al., 2010; Delfabbro and Thrupp, 2003; Delfabbro et al., 2005b; Derevensky et al., 2011].

2.5.2 Young people’s gambling related harm

Researchers suggest that young people are at an increased risk of developing problems with gambling [Blinn-Pike et al., 2010; Derevensky, 2012]. Studies examining rates of problem gambling in young people show that both boys and girls have a much higher occurrence of problems than adults [Derevensky, 2012]. These figures estimate that there could be 4% of Australian young people who may have problems arising from gambling [Delfabbro et al., 2005a], with international studies also finding figures around 4% [Derevensky et al., 2003], with as many as 15% at potential risk of developing problems with gambling [Blinn-Pike et al., 2010; Delfabbro et al., 2005b]. Recent research with adolescents from Great Britain aged 11-16 years found much lower results, with 0.9% of young people classified as a ‘problem gambler’ [Gambling Commission, 2017]. The harms associated with young people who may have gambled are similar to those for adults. These harms are associated with mental health, such as anxiety and depression, along with low self-esteem and suicide [Delfabbro and Thrupp, 2003; Hardoon and Derevensky, 2002; Messerlian et al., 2004b]. Research has also suggested that young people who develop problems with gambling may have relationship difficulties with family members and friends; financial problems; dropping out or truancy from school; criminality; and may engage in other risk taking behaviours such as alcohol misuse, drug use and unsafe sex [Delfabbro and Thrupp, 2003; Delfabbro et al., 2014; Messerlian and Derevensky, 2005].
Young people may develop harm from gambling as they are likely to transition from social to harmful gambling at a quicker trajectory than adults, and those who develop problems with gambling often start at a younger age compared to adults typically due to parental influences [Blinn-Pike et al., 2010]. These risk factors are also similar in other areas of public health such as alcohol and tobacco. For example, research has found that young people who started smoking or drinking in their youth were more likely to have parents that smoke or drank [Bobo and Husten, 2000], and adult smokers often reported starting during adolescence [Gilman et al., 2009]. The similarities between gambling, tobacco and alcohol indicate a need to ensure that actions are taken to ensure the initiation of the products is limited within childhood and adolescence.

2.5.3 The determinants of gambling in young people

Much less research has focused on the determinants that may encourage young people to gamble and the factors that may increase their risk of developing harms from gambling – for example the individual attributes of young people; the role of societal, peer and family influences; environmental determinants; and the role of the gambling industry. Specific individual determinants identified by researchers include: 1) young people being overly confident with their ability to take risks [Derevensky and Gupta, 2004; Gupta and Derevensky, 1998]; 2) an inability to understand the odds of winning and differentiate between chance and skill [Messerlian et al., 2004b]; 3) the age at which young people start gambling (with younger children more likely to develop a problem with gambling products) [Reith and Dobbie, 2011; Wood and Griffiths, 1998] and 4) the impact of ‘winning’ early, which has been shown to increase young people’s perceptions of their ability to win in the future [Delfabbro and Thrupp, 2003; Hardoon and Derevensky, 2002].

Researchers have also noted the socio-cultural determinants that may influence young people’s attitudes towards gambling. Some argue that because gambling is a socially accepted pastime in some communities, gambling can be seen as a ‘rite of passage’ for young people [Delfabbro and Thrupp, 2003; Hardoon and Derevensky, 2002; Messerlian et al., 2004b]. Researchers have overwhelmingly
focused on the role of families in encouraging these perceptions in young people. For example, researchers have shown that young people who have parents that gamble were more likely to gamble themselves, and were also more likely to develop problems with gambling [Delfabbro and LeCouteur, 2003; Delfabbro and Thrupp, 2003]. Researchers have also shown that young people often gamble within their own home, in many instances with their parents facilitating gambling or aware of their gambling behaviours [Hardoon and Derevensky, 2001; 2002].

A small number of studies have investigated the role of environmental determinants in young people’s gambling attitudes and behaviours. Although there has been limited evidence about the impact that gambling environments have on young people’s long or short term gambling behaviours, most research in this area has focused on exposure to gambling in online environments [Derevensky and Gupta, 2007]. Researchers’ hypothesise that new technologies and the Internet provide an attractive environment for young people to participate in gambling [Derevensky and Gupta, 2007; Dussault et al., 2017; Messerlian et al., 2004a]. Studies have suggested the ease of gambling from home, the ability to gamble 24/7 and the limited security in place online as factors that appeal to younger people [Derevensky et al., 2011; Derevensky and Gupta, 2007; Messerlian et al., 2004a]. Young people have discussed excitement, entertainment, and the possibility of winning as the main reasons they enjoy gambling online, as well as convenience, accessibility, and privacy/anonymity [Derevensky and Gupta, 2007]. Derevensky and Gupta [2007] report the high speed nature of online gambling, ‘practice’ online sites that allow young people to play games without money and child friendly promotional material as contributing to the risks of young people developing or exacerbating current gambling problems.

Finally, a small number of studies have examined the commercial determinants of gambling harm and the impact the gambling industry’s strategies may have on young people. These studies demonstrate the way the gambling industry have attached their products to culturally valued activities to elicit positive emotions and responses from individuals [Bestman et al., 2017; Lindsay et al., 2013; Thomas, 2014]. For example, Bestman and colleagues [2017] explored how young people’s attitudes and consumption intentions towards EGMs were influenced by the co-
location of gambling products within venues that are marketed as ‘family friendly’. This has also been highlighted by research into advertising and promotion of gambling products, and how this advertising, particularly during sport and online, may have an influence on young people’s attitudes towards gambling products [Thomas, 2014; Thomas et al., 2015]. However, there has been very limited research, especially from a qualitative perspective, that has explored the impact and influence of sports betting advertising on young people’s gambling attitudes, behaviours and future consumption intentions.

2.6 The impact of gambling advertising on young people’s attitudes and product consumption intentions

Research into the impact and influence of gambling advertising is limited. Some research has documented young people’s recall of gambling advertisements, young people’s attitudes towards gambling and the influence of gambling advertising on young people’s consumption intentions. A summary of research that has explored gambling advertising and young people is provided in Appendix A.

2.6.1 Young people’s recall of gambling advertising

Young people’s recall of gambling advertisements or brands has been a common inclusion in most international and Australian studies [Delfabbro et al., 2005b; Derevensky et al., 2010; Hing et al., 2014; Korn et al., 2005]. For example, Derevensky and colleagues [2010] found that 96% of participants in Canada aged 12-19 years could recall seeing a gambling advertisement on television. Another Canadian study, from Korn and colleagues [2005], also found that many young people aged 13-17 years could remember a gambling advertisement that they had seen on television. Hing and colleagues [2014] found that over 40% of young people in Queensland aged 12-17 years could recall a gambling brand. Delfabbro and colleagues [2005b] found that most participants (aged 11-19 years) from the ACT could recall seeing a gambling advertisement in the past week, with many identifying a lottery advertisement. However there has been little exploration of
the impact this recall has on young people’s attitudes and intentions to gamble.

2.6.2 How does gambling advertising influence young people’s perceptions of gambling and are there any strategies known to appeal to young people?

There have only been a small number of studies that have explored the content of gambling advertisements and how this may appeal to young people [Derevensky et al., 2010; Korn et al., 2005; McMullan et al., 2012; Sklar and Derevensky, 2010]. Strategies have been found to be similar to other unhealthy products such as tobacco and alcohol, for example humour, colours, and celebrities [Fielder et al., 2009; Gunter et al., 2008; Nash et al., 2009]. Other studies have demonstrated that there are strategies specific to gambling that are used within advertisements such as displays of winning, and ease of use [Korn et al., 2005; McMullan et al., 2012]. McMullan and colleagues [2012] conducted focus groups with young people, to identify what aspects of gambling advertising they liked or disliked. Participants thought the use of colour, ensuring advertisements were simplistic, and demonstrations of people winning or what could be won, was particularly appealing. Sklar and colleagues [2010] conducted a content analysis of lottery and scratch card advertisements and found that the main themes were associated with easy money, social status, glamour, humour, and youth culture.

Young people’s interpretations of gambling advertisements and how gambling advertising can influence their attitudes towards gambling have also been explored, including research reporting that young people described gambling advertisements as making gambling appear fun and exciting, and create a perception that gambling is an escape, a form of entertainment, and a benefit to society [Korn et al., 2005; Thomas, 2014]. Some studies have also found that young people perceive gambling advertising to be normalising gambling [McMullan et al., 2012; Sproston et al., 2015; Thomas, 2014]. For example, McMullan and colleagues [2012] found that 90% of females believed that gambling advertisements were trying to suggest that gambling was normal. Thomas [2014] interviewed 59 family groups consisting of 61 adolescents aged 14-18 years and a parent about the causes and consequences of gambling, risks and benefits of gambling and their interpretations of a range of gambling
advertisements (including sports betting). This study found that some adolescents and parents were concerned that sports betting advertising normalised or legitimised betting for young people. Sports betting advertising was also influential in shaping positive perceptions about sports betting. For example some adolescents described sports betting advertising as depicting sports betting as easy, and could add excitement to the sports viewing experience.

2.6.3 How does gambling advertising influence young people’s gambling attitudes and consumption intentions?

There have been very few studies that have explored how gambling advertising influences young people’s gambling consumption intentions. A study by Felsher and colleagues [2004] found that 40% of young people indicated that they would like to buy a lottery ticket, after they had seen an advertisement for lotteries. This was similar to another Canadian study, which found that nearly half (42%) of young people indicated a desire to try gambling after seeing an advertisement for a gambling product [Derevensky et al., 2010].

Hing and colleagues [2014] explored young people’s (aged 12-17 years) sports viewing, their recall and attitudes towards gambling advertising and sponsorship of sport, and more specifically young people’s attitudes towards sports betting advertising and the influence advertising may have on future use. Although some of these questions were more generally about gambling, when asked to name a gambling brand 40% of young people were able to do so, with many identifying a sports betting company. Young people had relatively negative views about sports betting advertising within sport, and in most cases did not believe that the advertising could influence their behaviour in the future. However of the young people who did say the advertising could encourage them to gamble, there was a relationship with the amount of sport that they watched. This suggested that the more sport young people watch, the greater risk they have of being exposed to sports betting advertising and for it to have an impact on their attitudes and consumption intentions towards gambling.

A study by Sproston and colleagues [2015] included a range of different
population sub groups, however it is appropriate here to comment only on the aspects that included young people. The study had two phases: the first was a focus group with adolescent males, and the second was an online survey that included adolescent males and females. This study found that many adolescents had been exposed to sports betting advertising, particularly on television. Adolescents thought that sports betting advertising demonstrated gambling as easy and accessible. This study also found that adolescents believed that sports betting advertising may be trying to encourage young people to use the product when they were older.

Finally, a study by Thomas and colleagues [2016], surveyed 152 family groups consisting of 8-16 year olds and their parents about gambling sponsorship relationships, and attitudes towards sports betting advertising within sport. This has been the only sports betting advertising study that has included children under the age of 11 years. Based on a study by Pettigrew and colleagues [2013], the study asked young people to implicitly ‘match’ AFL and NRL teams with brand pictures, along with some qualitative questions about sports betting advertisements that they had seen. This study found that over 75% of young people could name at least one sports betting brand name. When young people were asked to select a favourite brand, more young people selected a gambling brand as their favourite product compared to alcohol (although junk food had the highest). Young people also expressed concerns over the amount of sports betting advertising that was present within sport, with some young people believing that sporting codes had a responsibility to reduce the amount of advertising within sport.

These studies have identified that young people have some awareness and recall of sports betting brand names and advertisements. There is also some evidence to suggest that the advertising young people see during sport may be influencing young people’s positive attitudes towards gambling, for example that it can be fun, lead to winning money, and can increase peoples enjoyment of sport [Thomas, 2014; Thomas et al., 2016]. There has also been some evidence to show that young people have some negative views about advertising of gambling within sport [Hing et al., 2014]. However there has been little research that has aimed to explore the extent to which sports betting advertising is impacting on young people’s attitudes
towards gambling or how the messages within advertisements may be shaping their perceptions around the risks associated with sports betting.

2.7 Chapter summary

This chapter has outlined an overview of the current literature within gambling that is relevant to the concepts and themes that will be explored in this thesis. It began with outlining gambling harm in Australia, then contextualised gambling within Australia and the commercialisation of sports betting. This chapter has also explained the different factors that may be influencing young people’s gambling attitudes and behaviours with a main focus on exploring the research within advertising and other areas of public health. However, this literature review has highlighted some key gaps in the current evidence. These include the limited evidence surrounding the extent to which young people, especially younger children recall advertising within different environments, how specific strategies within sports betting advertising may be influencing young people’s perceptions and attitudes towards gambling, and the influence of the alignment of gambling within culturally valued events such as sport. There is also limited evidence that has shown how young people may be learning about sports betting from the advertisements that they have seen. The following chapter will outline the theoretical lens that have been used to guide this thesis and the development of the studies.
Chapter 3. Theoretical Framework

3.1 Chapter overview

This chapter describes the key theoretical concepts that were used to develop each of the studies presented in this thesis, and how they guided the development of specific research questions for each publication presented in this thesis. As most of the studies in the thesis were published in journals with limited scope for theoretical discussion and strict word limits, this chapter will describe and justify the use of each concept, and how the concepts apply to each study and publication. The discussion section of this thesis will return to the theories presented in this chapter, describe whether the studies supported the theories, and also propose any new theories to emerge from the data.

3.2 Consumer Socialisation Theory

The overarching theory used in this thesis was Consumer Socialisation Theory [Ward, 1974]. The following section outlines the key theoretical concepts, the link between advertising and consumer socialisation, the application of consumer socialisation theory in other areas of public health, and how this theory applies to the studies in this thesis.

3.2.1 Defining Consumer Socialisation Theory

Consumer Socialisation is a theory which specifically relates to the factors that shape consumption patterns in children. Scott Ward, who wrote the seminal article on Consumer Socialisation Theory [Ward, 1974], observes that the theory emerged from studies in the behavioural sciences which hypothesised that experiences in childhood had a major influence on shaping and priming both patterns of cognition, and behaviours into adolescence and adulthood. He applied these concepts to understand whether experiences in childhood could also determine consumption behaviours in later life [Ward, 1974]. He defined Consumer Socialisation as:
“…processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace.”

[Ward, 1974, p. 2]

Ward [1974] clarifies three points within the definition:

1. That the focus is on childhood socialisation (although this has been expanded in other more recent research to consider other stages throughout adolescence) [Ward et al., 1987];
2. That the definition is only relevant to the market place (or commercial) transactions; and,
3. That the definition covers both indirect and direct consumption behaviours, skills, knowledge and attitudes.

The definition also takes into account the way that children develop their own attitudes, opinions, and decision making about their consumer role as related to different products, and how these may motivate the consumption or intention to consume (or not consume) these products.

Ward [1974] also notes how children interpret information and change as consumers over the course of their development as necessary aspects of understanding and conceptualising consumer socialisation. He writes about the way children learn and develop attitudes towards the “social significance” of products and brands and details how children develop the skills that enable them to realise that some brands are acceptable while others are not [p. 3]. Ward [1974] states that he believes this theory is best to be considered as a “developmental phenomenon” that focuses mainly on the way children develop different skills and gain knowledge over their childhood and adolescence [p. 4].

While Ward [1974] stated that the study of consumer socialisation could contribute to the development of more effective marketing campaigns directed at children, he also stressed the importance of how an understanding of the processes associated with children’s consumption attitudes and intentions could guide effective public
policy, particularly in the critical understanding of marketing campaigns. Thus, this theory, and Ward’s [1974] suggestions relating to the use of the theory, is capable of being applied to understand the processes that may be occurring within sports betting advertising to socialise children’s attitudes, beliefs and knowledge towards sports betting, as well as the public policy approaches that public health practitioners may use to respond to these strategies.

### 3.2.2 Expanding the definition and application of Ward’s definition

While Ward’s initial definition and conceptualisation of consumer socialisation, has been critiqued, expanded, and adapted, there is still a broad acknowledgement that consumer socialisation is an important theory which researchers are able to use to understand how consumers make decisions within different cultural contexts [Ekström, 2006]. In a large-scale study on adolescent consumer socialisation, Moschis and Churchill Jnr [1978] stated consumer socialisation as the development of attitudes, knowledge and skills that are gained by an individual, predominantly during childhood; however, they also acknowledge that the process continues over the course of an individual’s life. This is because new information is constantly gained and individuals then use those new skills or attitudes to determine their consumption intentions. They describe consumer socialisation as being a growing area of interest, not only for marketers but also for policy makers and educators who want to ensure that children are developing the correct skills and prepare children for the different agents that may be socialising them.

Dotson and Hyatt [2005] have highlighted how consumer socialisation research has changed and has been adapted to the changing consumer environment, including the different roles that children now play in the consumer experience. They identify the much larger role children have in the decision making process in regards to shopping compared to previous generations. This has partly been due to the facts that shopping has become a much greater form of entertainment for youth and that the accessibility and convenience of going to shopping malls or centres has dramatically increased [Dotson and Hyatt, 2005]. They also describe that children’s consumer behaviours are also changing, with children aged 5-12 years accessing commercial product websites and buying items online, and mass media
environments encouraging children to value brands and be influenced by celebrity endorsements.

Despite the changes in children’s consumption environments, most researchers have argued that Consumer Socialisation Theory still provides a useful guide in understanding how individuals make decisions about the products that they choose to consume. For example, Ekström [2006] stated that:

“…its potential lies in comprehending how consumers relate to culturally determined societal norms and how they adapt to transformations in society.” [Ekström, 2006, p. 72]

This is because it is important to understand the context in which individuals are making decisions and gaining information in order to better understand people’s consumer behaviours. This is a particularly important point for this thesis, which explores whether the alignment of sports betting with sport is creating a new set of social norms for children which links, and indeed embeds, gambling within sport. This includes how children make sense of, and form attitudes towards the promotion of these products within these culturally determined environments.

3.2.3 Socialising environments

While Ward [1974] focuses on factors that may contribute to children becoming effective consumers, Ekström [2006] poses the question about the extent to which different agencies (such as schools, parents, and governments) should take responsibility to teach people to function better as consumers. In the case of the research in this thesis, it is also argued that this could be extended to understand whether there is a responsibility for different agencies to protect young people from being exposed to sports betting advertising, in essence disrupting the consumer socialisation process until young people are able to make informed decisions about the advertising for potentially harmful products.

Ekström [2006] has also discussed whether living in a rapidly changing consumer environment, in which young people receive information about products and
brands in a range of different environments including at school, shopping centres, through television and the internet, may lead to either desirable or undesirable outcomes. While research has traditionally focused on consumer socialisation processes related to television advertising and children [Dotson and Hyatt, 2005; Moschis and Churchill Jr, 1978; Sancho et al., 2011] it is important to note that children receive information about products from a variety of different sources. In a study conducted in 1985, children could recall advertising in many different environments, including television, cinemas, print media, shop windows, and radio [Aitken et al., 1985]. Due to developments in technology and the internet, the range of different marketing channels has rapidly increased. Therefore children are potentially exposed to advertising information that may be difficult for parents, educators, and governments, to counteract. This thesis aims to understand where and how young people are receiving information for adult products such as sports betting, and to explore these exposures through the lens of harm reduction.

3.2.4 Cognitive development on consumer decision making: the impact of age on interactions with advertising

Ekström [2006] noted that in order for a child to be socialised by the media there must be some level of cognitive development that enables children to decipher and understand advertising messages. John [1999] stated that consumer socialisation as seen in children is a process that requires children to have the ability to make decisions and interpret the messages that appear to them. John [1999] explains three different developmental stages that influence how children interact with advertising and therefore their ability to be consumers. The first is the perceptual stage (ages 3-7 years), whereby children often take information at face value, and have limited ability to question or interpret the information they see. This often means that children will make decisions based on very basic knowledge and are influenced by superficial features of products. The next stage is known as the analytical stage, and is usually seen in children aged between 7-11 years. During this stage, John [1999] describes children as going through the most dramatic changes in terms of their ability and understanding of consumer related information. Children in this analytical stage are able to consider different pieces of information and create their own thought through decisions. Third is the
reflective stage, which is typical of children aged between 11-16 years. This is when children have further developed the initial skills in the analytical stage, as children become more reflective on their attitudes and knowledge. Children in this stage are able to understand and interpret even more difficult concepts and messages and can easily adapt to different pieces of information in order to form their own opinion of a product. This stage is also influenced by social contexts and cues [John, 1999]. These social cues increase children’s perceptions of the social desirability and value of engaging with certain products, and whether these elicit positive or negative social responses from others.

In understanding the differences between these phases, it is useful to briefly consider evidence from other areas of public health. There is a limited amount of research that has been conducted with children in the perceptual stage. There has been some evidence that indicates that younger children have an awareness of different tobacco and alcohol companies, for example, 229 children aged three to six years old were shown logos for different brands, including adult products such as cigarette logos and child orientated products [Fischer et al., 1991]. This study found that over half of children recognised Joe Camel (the mascot of cigarette brand Camel) and were able to match this image with the product, cigarettes. Recognition of the brand character Joe Camel and the product category (cigarettes) increased with age, with children aged six years old showing no significant differences between their ability to recognise and match Joe Camel and the Disney Channel logo with their respective product categories. Another international study interviewed children (from Brazil, China, India, Nigeria, Pakistan, and Russia) aged five and six years old, about logo recognition. This study found that just under 70% of children were able to match at least one cigarette brand logo, and just under 20% were able to name four or more brands [Borzekowski and Cohen, 2013]. However there has been very limited research that has explored how this brand recognition may be influencing younger children’s attitudes towards the product.

There has been more research that has explored young people within the analytical and reflective stages. Casswell and colleagues [1988], found that children as young as eight were able to describe the consequences of drinking alcohol and had recall
of advertisements for alcohol products. Over a third of children reported receiving information about alcohol from content that they had seen on television, demonstrating the influence television and media may be playing in the development of children’s knowledge about adult products, like alcohol. However there is no research that has provided a good understanding of how young people may be developing knowledge about gambling products. Another study with 10-17 year olds found that boys aged 10-13 years were most likely to agree that the scenes within alcohol advertisements were realistic, and that advertisements were a source of information about alcohol, and could encourage young people to drink [Wyllie et al., 1998]. These studies suggest that children of all ages demonstrate different levels of awareness and recall of unhealthy product advertising.

This thesis focused on the analytical (7-11 years) and reflective (11-16 years) stages of the consumer socialisation process. These stages were chosen for two main reasons. The first was the limited knowledge of children’s intentions to gamble and the different factors that have influenced young people’s attitudes, knowledge and behaviours towards gambling. As the majority of research into young people and gambling has focused on adolescents, this thesis aimed to include younger children (eight years old and over) in order to gain a greater understanding of the impact of sports betting advertising. Second, these two age groups were selected because gambling can be a relatively difficult concept for children to understand. For the scope of this thesis it was decided that children under the age of eight years old may find it too difficult to participate in some of the studies such as sit down interviews due to the complex nature of the topic.

3.2.5 Consumer socialisation agents

Consumer socialisation agents are the factors to which the ‘learner’ or child are exposed, and which “transmit norms, attitudes, motivations and behaviours” [Moschis and Churchill Jr, 1978]. Researchers have identified three main agents in the consumer socialisation process [John, 1999; Moschis and Churchill Jr, 1978; Ward et al., 1987], each of which may influence the process in different ways and at different points in the child’s development.
a. Family

Family members are believed to be one of the most influential agents in the consumer decision making process [Moschis and Churchill Jr, 1978; Sancho et al., 2011]. Most research which has investigated the impact of family members on consumer socialisation has explored the impact of parents’ values, purchasing behaviours, and brand preferences on children’s attitudes and behaviours [Cotte and Wood, 2004]. Most of this research has investigated the impact of communication patterns about products and consumption behaviours, and how this may create a process of positive behavioural modelling on children [Carlson and Grossbart, 1988; Carlson et al., 2001; John, 1999; Mandrik et al., 2005]. For example, alcohol and tobacco studies generally show that parents may either positively or negatively influence children’s attitudes and behaviours via their own values and behaviours [Ennett et al., 2001; Sancho et al., 2011; Yu, 2003].

However, there may be significant differences between parental modelling in alcohol and tobacco, and sports betting or other forms of gambling. First, online sports betting is a new product in relation to gambling, with very few adults over the age of 35 years engaging regularly in sports betting [Hare, 2015]. Second, unlike tobacco and alcohol use, which are activities that can be observed in multiple environments, sports betting is a relatively hidden behaviour with betting not clearly visible. Therefore, unless sports betting is being directly modelled with the child, it is unlikely that children would observe this behaviour in the home. Finally, research currently indicates that parents have very negative attitudes towards sports betting, and particularly the advertising of betting products [Thomas, 2014]. In this context, do children have the same critical views as their parents, or are there other socialising agents that may outweigh parents’ attitudes, and have an additional impact on positively shaping children’s views about sports betting? However it is important to consider that while research suggests that parents often do not regularly engage in sports betting (participation is highest amongst single men under 50 years of age) [Armstrong and Carroll, 2017], it still is a developing and growing product. The effects of parent modelling of this behaviour may be something that needs to be explored in the future if research shows participation increasing in this group.
b. Peers

While parents are arguably the most influential in young children’s consumer socialisation processes, peers are thought to be the main influencer on the consumer socialisation processes of adolescents. Although parents are still powerful influences, as children develop they transition to spending more time with their friends [Sancho et al., 2011]. Factors that influence children’s own behaviour include their perceptions of how much their friends are participating in the behaviour and their discussions within peer groups. For example, Unger and colleagues [2002] found that adolescents who perceived that their peers were smoking were more likely to smoke themselves, while a study by Burk and colleagues [2012] found that children aged between 13-18 years, were found to be in friendship groups with other peers who had similar drinking behaviours.

Gambling research has begun to show the influence gambling amongst friends can have on children’s gambling behaviours. For example, one study found that females in particular, would gamble more when they were in a group compared to when they were on their own [Hardoon and Derevensky, 2001]. This was also the same as males, but there was not as big a difference between males’ individual and group gambling behaviours. Delfabbro and Thrump [2003] also reported that adolescents who gambled often associated with peers who also gambled. The authors suggested this was because some adolescents will engage in risk taking behaviours, including gambling, and will normally engage in those activities with other similar youth.

c. The media (including advertising and promotions)

Finally, and most relevant to the studies presented in this thesis, is the role of the media. This is one of the most researched aspect of consumer socialisation, and the focus of much public policy discussion, particularly in relation to television advertising [McNeal, 2007]. Dotson and Hyatt [2005] described the way the media has changed, since the original development of consumer socialisation, with children being exposed to significantly more media and having a greater input into family consumer decisions than ever before. In tobacco research, advertising has
been termed the ‘super peer’ because of its ability to act as a positive source of information about a certain product or behaviour [Strasburger, 2001]. Elmore and colleagues [2017] described that the media creates opportunities for adolescents to receive information that normalises product use even when family members or peers do not use or engage with that product.

There are two key ways through which the media may directly or indirectly influence children’s decision-making processes. First is children’s repeated exposure to messages via a range of marketing channels. Exposure to advertising for products such as tobacco and alcohol found an increase in awareness and ability to recall those products [Aitken et al., 1986; Donovan et al., 2002]. Second is the content of advertising strategies, which may positively shape children’s attitudes towards these products, or a desire to consume products. For example, a study by Chen and colleagues [2005] found that children were most likely to indicate an intention to purchase an alcohol brand that had features which they liked, such as advertisements that contained animals, humour and the presence of enjoyable and catchy music.

### 3.2.6 Specific theoretical concepts explored in this thesis

Ward [1974] states that for researchers studying consumer socialisation, it is important to consider that consumer socialisation is about the range of phenomena that contribute to the development of consumption behaviours in children, and it is therefore important to focus on processes rather than just elements within the process. He gives the following examples:

“For example, it would seem to be more useful to know how children evaluate brands rather than simply how many brands they know. Similarly, it is more important to know how children process information in advertising rather than simply how many advertisements they see in a given time” [Ward, 1974, p. 12].

The studies presented in this thesis are therefore aimed at exploring a range of different phenomena in the promotion of sports betting that may be impacting on
children’s skills, knowledge, attitudes and consumption intentions associated with sports betting and sports betting brands and products. While these phenomena were identified in a range of different studies with children from different age groups, each study explored and incorporated questions relating to different ‘elements’ of consumer socialisation. Some of these concepts were asked directly of children. For example, their recall of brands or environments and where they recalled seeing advertising for sports betting. While some emerged from children’s narratives, such as children’s implicit recall of the information they saw about advertising, their perceptions of the links between sports betting and sports, their perceptions of influential factors within sports betting advertising, and their knowledge of, and attitudes towards sports betting.

The following section describes the theories associated with some of the specific consumer socialisation factors that were explored in this thesis.

a. Brand recognition, awareness and association

Researchers in other areas of public health such as alcohol have identified that brand recognition and awareness are some of the first markers of consumer socialisation processes in children [Harris et al., 2015]. The literature review of this thesis, describes how an increased number of online corporate bookmakers in the Australian market after the Betfair High Court decision [Oreb, 2009], coupled with a weak regulatory framework, had led to a saturated promotional environment for sports betting, whereby each bookmaker competes for brand recognition, awareness, and ultimately, loyalty. While corporate bookmakers argue that children are not the key target market for their products, there is limited information about a) whether this market saturation, particular during sporting matches leads to an increased recall and awareness of sports betting brands in young people, and b) whether certain appeal strategies (such as humour, celebrity or sports team endorsement) have a particular influence on children’s sports betting attitudes and consumption intentions.

In this thesis, two key concepts relating to children’s awareness of sports betting brands were explored. The first concept was brand recognition and awareness.
Aaker [1992] noted that brand awareness is the strength of the brand’s presence in the consumer’s mind. Brand recognition is often considered the first step in the consumer socialisation process as it is viewed as the essential building block in knowledge about products, and encourages identification with a certain company, and intentions to consume the product [Baker et al., 1986]. Thus understanding whether children can implicitly or explicitly recall sports betting brands, including whether some brands are recalled more than others, the meanings they associate with sports betting through these brands, and the alignment of these brands with sports is important in understanding consumer socialisation processes in relation to advertising and young people.

The second concept explored is brand associations [Keller, 1993; Pappu et al., 2006], or the meanings children associated with different sports betting brands, including their association with sporting codes and teams. The investigation of implicit and explicit recall of brand associations was important in this thesis given that research from alcohol and tobacco has demonstrated the impact of brands on adolescents’ attitudes towards these products, and their long term product consumption behaviours [Harradine and Ross, 2007; Jackson et al., 2000].

b. The recall of sports betting advertising in different environments

The second area was children’s recall of sports betting advertising in different environments. This was important in understanding the impact of socialising environments in the development of skills and information. Although Ward [1974] has written about the need to gain a greater level of information about children’s understandings about brands it was important to identify the different ways children felt they were exposed to sports betting advertising and how much they had absorbed from different environments. Repeat exposure and placement of advertising within environments that children engage with are important in the development of attitudes and knowledge. The more children are exposed to unhealthy product advertising the more likely it is that it will impact on their attitudes and behaviours towards that product [Anderson et al., 2009; Collins et al., 2007; Hanewinkel et al., 2011; Lovato et al., 2011; Robinson et al., 1998; Schooler et al., 1996; Wallack et al., 1990].
c. The impact of specific advertising strategies on betting knowledge and consumption intentions.

Observational learning associated with gambling occurs when an individual observes another person using products, and the positive (or negative) reinforcements that a person may receive when using those products [Bandura, 1971]. This concept, as part of Social Learning Theory, is a broader socialisation theory, in which consumer socialisation has been developed. Bandura [1971] describes observational learning as occurring as a result of four sub-processes; attention, retention, reinforcement and reproduction. These processes all relate to the way children interact with specific stimuli and how children use this information to make informed decisions to determine if they feel as though they should replicate the behaviour. Recent research has highlighted the influential role that the mass media plays in the observational learning process [Kennedy, 2000; Strasburger, 2001]. This is because, as previously noted, the media can be referred to as a ‘super peer’ who demonstrates positive outcomes of a product without any mention of any potential negatives. This has been of particular interest in this thesis, to understand if young people are being shown how to gamble through sports betting advertising.

Credibility, the ability of the brand to deliver what is promised [Erdem et al., 2006], may be particularly important for gambling companies because consumers will not always experience tangible benefits from engaging in products due to financial losses. Thus creating a perception that the brand is ‘fair’ and is associated with a reduced perception of risk associated with the product may be an important attribute for companies. For example, a relatively new strategy from sports betting companies has been the use of ‘risk reducing promotions’, defined as those promotions, used within advertising material, that encourage gambling due to a reduced risk associated with placing a bet. Some of the most common risk reducing promotions have been those that offer a refund or money or cash back if something does not happen, while other promotions have offered extra bets or ‘bonus bets’ [Hing et al., 2015]. Recent research conducted with young men has shown that these risk reducing promotions may be having a direct effect on
influencing men to gamble [Deans et al., 2017]. What is less clear is whether these advertising strategies create an inflated sense of trust and a reduced perception of risk for children, who may be more influenced by the persuasive intent of advertising campaigns and who may not have directly experienced the product due to legal age restrictions.

3.3 Chapter summary

This chapter has outlined the key principles of the Consumer Socialisation Theory that has been used to guide this thesis. It has provided a definition of Consumer Socialisation, the key processes that contribute to socialisation, the specific socialisation agents that are commonly reported in the literature, and has concluded with discussion as to how this theory has been used to influence the key areas of interest within this thesis and the development of the research studies. The following chapter will outline the key methodological approach taken within the studies in this thesis.
Chapter 4. Research Design and Methods

4.1 Chapter overview

This chapter will begin by restating the overall aim and research questions used to guide the methods of this thesis. The overall methodological approach of the thesis, and the methods associated with each study will then be described in detail.

4.2 Aim and research questions

4.2.1 Aim

The overall aim of this thesis was to explore the impact and influence of sports betting advertising on the attitudes, behaviours and gambling consumption intentions of young people. Because of the limited knowledge about the impact of sports betting and young people, four broad research questions were developed to explore the overall aim and to guide the research associated with the five publications presented in this thesis.

4.2.2 Research questions

1. What do young people recall from the advertising that they see from online bookmakers in different media and community environments?
2. How does sports betting advertising play a role in shaping the gambling attitudes and consumption intentions of young people?
3. What is the influence of the alignment between gambling and sport on the gambling attitudes, knowledge and consumption intentions of young people?
4. What are the range of public health strategies that may be used to respond to the influences of sports betting advertising on young people?
4.3 Methodological approach: Pragmatism

4.3.1 A pragmatic approach to research design

Researchers have argued that there should be an explicit discussion over the reasoning of the paradigm(s) chosen within research, in order to fully understand the tools that were used to conceptualise the research, interpret data, and draw conclusions from the research [Creswell and Plano Clark, 2007; Shannon-Baker, 2016]. Morgan [2007] describes a paradigm as:

“Systems of beliefs and practices that influence how researchers select both the questions they study and methods that they use to study them.” [Morgan, 2007, p.49]

A mixed methods approach to research is defined as:

“…the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study.” [Johnson and Onwuegbuzie, 2004, p. 17]

Because of this mixed methods approach, the thesis used a pragmatic paradigm. While there are a range of perspectives about the pragmatic paradigm, researchers are in broad agreement that the pragmatic paradigm employed within mixed methods research generally does not sit comfortably within either the positivist paradigms (that there is a ‘singular reality’) favoured by quantitative researchers, and constructivism (that there is no one single reality, and humans ‘construct’ knowledge based on their subjective interpretations of experiences) favoured by qualitative researchers [Feilzer, 2010]. As such, pragmatists could be described as being ‘anti’ or ‘non’ dualists, who seek to solve practical problems in the real world, and believe that understanding ‘reality’ involves a range of layers of experience, some of which are objective, and some of which are subjective [Feilzer, 2010; Tashakkori and Teddie, 2010]. As Creswell and Plano Clark
[2007] stated, pragmatism creates a structure in which researchers do not have to make a “forced choice dichotomy between postpositivism and constructivism” [p. 27]. This may also explain why pragmatism is often described as an ‘approach’ rather than a ‘paradigm’, as it offers ideas about what constitutes knowledge, but not within a specific worldview [Biesta, 2010; Morgan, 2007; Shannon-Baker, 2016].

Because of the range of concepts explored in this thesis across multiple studies, pragmatism created a flexible philosophical approach in the conceptualisation of the thesis. For example, it allowed for a more detailed, in-depth, and rich understanding of the phenomenon from a range of different perspectives [Creswell and Plano Clark, 2007; Doyle et al., 2009; Johnson and Onwuegbuzie, 2004]. One of the most important aspects of the pragmatic approach is that it emphasises the importance of “shared meanings and joint action” through the complementary use of qualitative and quantitative approaches [Morgan, 2007, p. 67]. This was also evident in the data analysis associated with some of the studies, using both inductive and deductive approaches (termed by pragmatists as ‘abduction’) [Morgan, 2007].

Finally a pragmatic approach was an appropriate ‘fit’ for the thesis because it is outcome oriented [Johnson and Onwuegbuzie, 2004] and focuses on “converting observations into theories and then assessing those theories through action” [Morgan, 2007, p. 71]. This is particularly important in a public health approach to gambling harm, because of the imperative to use different types of meanings to propose a range of policy and regulatory strategies, and then to use the evidence and implication from the research to appeal to different stakeholder groups to advocate for policy and regulatory changes to prevent and reduce harm.

4.4 Methods

This thesis comprised four studies, each of which explored the research questions, and contained a range of data collection methods and analysis. The first study was a secondary data analysis of face to face interviews with adolescents and parents,
the second an interpretive content analysis of betting advertisements, the third involved community surveys with young people (8-16 year olds) and parents, and the fourth was qualitative face to face interviews with young people who were AFL fans aged 8-16 years (Table One). While each paper presented in this thesis provides a description of the methods used in each study, the following section provides a more extensive overview of the research questions used within each study, the methods, and ethical approval process.

**Table One:** Overview of the four studies in this thesis

<table>
<thead>
<tr>
<th>Study One: Understanding how adolescents and their parents conceptualise the relationship between gambling and sport.</th>
<th>Method</th>
<th>Sample</th>
<th>Location</th>
<th>Key Questions</th>
<th>Ethics Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary data analysis.</td>
<td>61 adolescents (14-18 year olds), and 59 parents.</td>
<td>Melbourne, Victoria.</td>
<td>What are adolescents’ attitudes towards the gambling advertising they have seen during sport?</td>
<td>University Human Research Ethics Committee, Department of Justice.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Two: Strategies within sports betting advertising that may have specific appeal for young people.</th>
<th>Method</th>
<th>Sample</th>
<th>Location</th>
<th>Key Questions</th>
<th>Ethics Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpretative content analysis.</td>
<td>91 betting advertisements from 11 betting companies.</td>
<td>N/A</td>
<td>Are there attention strategies known to appeal to young people in betting advertisements?</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Three: The role of sport as a normalising and socialising agent for sports betting.</th>
<th>Method</th>
<th>Sample</th>
<th>Location</th>
<th>Key Questions</th>
<th>Ethics Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community surveys.</td>
<td>152 young people (8-16 year olds), and 152 parents.</td>
<td>Professional and junior AFL, NRL and soccer events in NSW and Victoria.</td>
<td>Can young people recall where they have seen or heard sports betting advertisements? What do young people remember about the advertisements they had seen?</td>
<td>University of Wollongong Human Research Ethics Committee.</td>
<td></td>
</tr>
</tbody>
</table>
Study Four: The influence of sports betting advertising on young people’s attitudes, knowledge and consumption intentions.

| Qualitative interviews. | 48 AFL fans (8-16 year olds). | Melbourne, Victoria. | What are young people’s attitudes towards different gambling products? What are the different factors that influence young people’s current or future gambling intentions? What are young people learning from sports betting advertising? | University of Wollongong Human Research Ethics Committee, Deakin University Human Research Ethics Committee |

4.4.1 Study One: Understanding how adolescents and their parents conceptualise the relationship between gambling and sport.


4.4.1.1 Overview of Study One

This study involved secondary data analysis of qualitative interview data collected as part of a study funded by the Victorian Responsible Gambling Foundation investigating the gambling attitudes and behaviours of parents and adolescents (14-18 years) [Thomas, 2014]. While secondary analysis is common in quantitative data studies, it is less common in qualitative studies. However, researchers are increasingly exploring methods for conducting secondary data analysis with qualitative data sets [Long-Sutehall et al., 2011]. Researchers argue that there may be a wealth of important information contained within qualitative studies, which Long-Sutehall and colleagues [2011] argue “offer narratives that
discuss issues related to the primary research questions, but which have never been analysed” [p.336].

The aim of this study was to answer new research questions using data that had already been collected within the study. The analysis of this rich data set was important in contributing further evidence on parent and adolescent attitudes towards gambling advertising, thus “lend(ing) new strength to the body of fundamental social knowledge” [Glaser, 1963, p. 11], particularly given the extremely limited published information about the impact of sports betting advertising on young people. Further, the analysis of the data enabled me to understand the topic area from the perspective of adolescents, and to develop theoretical insights from the data that would inform the future studies presented in this thesis. The original aims of the study were to examine [Thomas, 2014, p. 4]:

1. How socio-cultural factors may influence the meanings individuals construct about gambling.
2. How different audience segments (in this case parents and their children) interpret messages about different types of advertisements in different ways.
3. How the framing of messages about gambling may influence perceptions about the risks and benefits associated with different types of gambling products and services.

The data analysis aimed to extend the aims by applying a new perspective and conceptual focus to the data, exploring how adolescents and their parents described the processes, influences and impacts of the advertising of gambling within sport on the gambling beliefs and behaviours of young people. To do this, the analysis of the existing data set was guided by three key research questions:

1. How do adolescents and their parents describe the relationship between gambling and sport? What factors may influence these perceptions?
2. How do adolescents interpret the messages they see about gambling during sport?
3. Is there evidence to suggest that young people are increasingly viewing sport through a ‘gambling lens’?

It is important to note that prior to utilising this data, the data was read and re-read to determine if there was enough relevant data within the transcripts to answer the above questions. The dataset was discussed with the supervisory team to determine the ‘fit’ with the overall aims and objectives of the thesis. While this was a secondary analysis of data, it is relevant to briefly outline the methodological processes that were used within the study.

4.4.1.2 Recruitment and sampling

A commercial market research company was employed to recruit family groups for this study. The specifications that were provided to the company included at least one parent and one adolescent, and people living in Victoria, Australia. The company’s role was to find potential participants and provide their contact details (with permission) to the research team so that researchers could contact them. If families were contacted there was no obligation to participate in the study, however it gave the opportunity to discuss participant requirements, for a Plain Language Statement to be distributed, and any questions to be answered. Parents could then decide if they wanted to participate in the study. Families who did not speak English, were not eligible to complete the interview. Families were given a $100 grocery voucher for their participation in this study.

A staged recruitment process was used to ensure that data analysis could occur and any changes to the interview schedule could be made. This is very common in qualitative research as it allows for questions which have not been interpreted or that do not generate the response that was anticipated to be modified. Recruitment was finalised when the research team concluded that there were no new themes emerging from the data in light of the original study aims and objectives.
4.4.1.3 Data collection

The interviewing process took place within family homes in 2012, with parents and adolescents aged 14 to 18 years old. All interviews were conducted by two researchers, with one who would take notes during the interview, while the other asked questions and engaged with participants. Interviews were recorded using an audio recorder, with the permission of the participants. Qualitative interviews usually lasted between 45 and 120 minutes with parents and their children answering questions together and separately.

The interview schedule was divided into two main sections, initially parents and adolescents were separated and gambling behaviours were discussed. The main themes of the questions that were asked in this study included: perceptions of problem gambling, risks and benefits of gambling, gambling behaviours, interpretations of gambling advertising, and attitudes towards mandatory gambling warning messages. Adolescents were separated from their parents when sensitive questions or questions that were specifically about gambling behaviours were asked, so that adolescents could feel as though they could answer honestly. Parents and adolescents were brought together and shown different types of gambling advertisements. This included traditional advertisements such as television commercials, and non-traditional advertisements such as live crosses to gambling company spokespeople. This section of the interview was conducted with both parent and adolescents to initiate a discussion about the advertisements. The advertisements were also shown in random order amongst family groups to avoid any bias. Interviewing young people in front of parents can be difficult because of the social desirability effects; however researchers tried to address this by encouraging young people to answer questions first. Interviews were transcribed by a professional transcription company.

4.4.1.4 Data analysis

Constructivist grounded theory was used to guide the analysis of the data within this secondary data analysis. Constructivist grounded theory, recognises that each individual has their own experiences and biases when conducting research and
analysing data [Charmaz, 2006]. This approach then acknowledges that if someone else was to analyse this data different conclusions may be drawn. The approach aims to be theory generating, and involves analysing the data and allowing themes to emerge, rather than using pre-conceived ideas. This study was used to provide an initial starting point for this thesis, to understand what adolescents already knew about gambling advertising and to identify key areas for future exploration.

The analysis of this data occurred through a number of different steps. First, the transcripts were read and re-read, with notes taken about the broad range of themes within the interviews [Charmaz, 2006]. Transcripts were then uploaded to QSR Nvivo, to manage the data. The next step in the data analysis process was to separate out all of the relevant data, which specifically related to adolescents and parents views about sport and gambling advertising. This was conducted using open coding with very broad themes associated with sport and gambling advertising. Initial coding allows the researcher to go through the data line by line. Charmaz [2006] notes that initial coding can be particularly important for identifying ‘fit’ and ‘relevance’ of the data in relation to the research questions. The next step was focused coding, whereby the basic themes identified from the initial coding were evaluated for the best analytical fit for the research questions and purpose of this study.

The data were read and compared as a whole, across and within family groups, and by adolescents and parents. Theoretical coding was then conducted to understand the relationships between the codes developed in the focused coding stages [Charmaz, 2006]. The members of the research team met regularly to discuss the different ideas and concepts that emerged from the data. Concepts from the Consumer Socialisation Theory were also drawn on while considering the different relationships that were presented within the codes - for example, the relationship between gambling and sport as a socialising agent.

4.4.1.5 Study limitations

There were four key limitations to this study. The first was conducting a secondary data analysis and the limitations that were involved in terms of applying an
existing data set to investigate new themes. The second was that the interviews were conducted by other researchers, and there were thus natural limitations associated with understanding the context of the interviews, and any dynamics within the family groups. However this was overcome by talking to my supervisor who conducted some interviews, and by reading the transcripts. Third, the sample was not representative of the general population, due to the large number of high income households (with an income greater than $100 000 per annum). Finally, adolescents and parents recall and discussions were based on viewing advertisements, rather than unprompted recall of what they remembered seeing.

4.4.2 Study Two: Strategies within sports betting advertising that may have specific appeal for young people

4.4.2.1 Overview of Study Two


Given that Study One aimed to explore adolescents’ attitudes towards the gambling advertising that they had seen during sport, the second study in this thesis focused on the content of sports betting advertising, to gain a better understanding as to what young people may be exposed to. This study aimed to explore the content of betting advertisements to identify if there were strategies within them that are known to appeal to young people. The research was guided by two research questions:

1. Is there evidence that sports betting advertisements contain promotional strategies that may specifically appeal to young people?
2. What is the extent and nature of these strategies?

69
An interpretative content analysis was conducted on 91 sports betting advertisements. A content analysis is a method that allows for the quantification of data into groups or categories [Elo and Kyngäs, 2008]. This allows the researchers to be objective and group similar items together under codes, with the assumption that everything within that code is relatable. This approach was also taken to ensure that the messages of the advertisements were considered as one stimulus and acknowledges the whole context that the advertisement was shown in [Elo and Kyngäs, 2008]. Elo and Kyngäs [2008] describe the use of two approaches to a content analysis: inductive and deductive. A deductive approach was best suited to this study as I used the existing literature in other public health areas to understand if similar strategies were being used within sports betting advertisements. Elo and Kyngäs [2008] described the benefits of this method of analysis as being flexible and adaptable so that changes can be made to the coding categories if new results are found, and Woodrum [1984] described the method as being “unusually safe” as researchers are able to adapt their criteria’s and recode stimuli if there are any changes or concerns [p. 6]. Ethical approval was not needed for this project as it did not involve human participation or pose any risks to humans.

4.4.2.2 Construction of the coding template

Attention strategies are considered to be specific strategies within advertisements that ‘grab’ the attention of the audience, in order to prompt brand awareness and recall, and to generate a positive consumer response [Sutherland and Sylvester, 2008]. This study aimed to develop a coding framework to analyse sports betting advertisements for the different attention strategies that have been used and that may have a particular appeal for young people. The coding framework was developed using a deductive approach, which means that it applied existing knowledge to the data [Elo and Kyngäs, 2008]. First, the literature was reviewed relating to the attention strategies used within tobacco, alcohol and gambling advertising that are known to appeal to young people [Chen et al., 2005; Hastings et al., 2010; McMullan et al., 2012; Nash et al., 2009; Sklar and Derevensky, 2010]. We did not review or include attention strategies for junk food because young people can legally purchase these products, whereas tobacco, alcohol and gambling are products that can only be legally purchased by adults. The key
attention strategies that were identified as having specific appeal for young people were noted, along with any evidence of their impact on young people. Once the themes were established the evidence was summarised relating to why these types of attention strategies appealed to young people. Advertisements were then viewed to identify if there were any other attention strategies that may not be in the existing literature. Additional strategies were found and evidence that suggested that they could be appealing to young people was documented. Examples included risk reducing promotions and technology. Descriptions for each of the attention strategies were defined as they would apply in a sports betting context. Attention strategy descriptions and adaptations to a sports betting context can be found in Publication Two. The aim of these descriptions was to guide researchers in appropriately coding the content of each stimulus and for potential use in future research that maps and monitors strategies in sports betting or gambling advertisements.

4.4.2.3 Data collection and application of the coding template

Advertisements were identified predominantly via sports betting company YouTube channels, sports betting websites were also searched as were general Google searches, to see if any other sports betting advertisements could be identified. Words such as “sports betting advertising” and “Australian sports betting advertisements” and variations of these words were included in the search for advertisements. The original scan identified approximately 61 advertisements, with a further 30 advertisements later found. This resulted in a data set of 91 advertisements from 11 betting companies: Bet365.com.au, Betfair.com.au, Centrebet.com.au, Crownbet.com.au, Ladbrokes.com.au, Sportingbet.com.au, Sportsbet.com.au, TAB.com.au, TomWaterhouse.com, Ubet.com.au, and WilliamHill.com.au. As online bookmakers also provide markets on horse races, we chose to include advertisements for both sporting and horse events, given that this study aimed to identify strategies that young people may find appealing and all advertisements were considered to be promoting the brand. Advertisements were also only included if they were posted during 2008-2015, and included a mandated Australian responsible gambling statement.
Once all advertisements had been identified, the coding template was tested to ensure it was capturing all of the main features of the sports betting advertisements that may have appeal to young people. The coding template was applied to over 20 advertisements by three researchers to ensure coding consistency. I then coded the rest of the advertisements. Throughout the coding process advertisements were discussed amongst the research team to ensure that everyone had similar interpretations of how the coding framework would be applied. Due to the large volume of advertisements, advertisements were viewed anywhere between 5-10 times to ensure that the coding framework was applied how it was intended.

4.4.2.4 Data analysis

Once the coding framework had been implemented, basic frequencies were calculated within Microsoft Excel to identify how many attention strategies were used per company, the total amount of advertisements that contained each attention strategy, and the average amount of attention strategies that were used overall and per company. Examples from the advertisements were then reported to add additional qualitative detail and description to the numeric data. This was a way of demonstrating to the readers the application of the coding framework and to understand the way sports betting companies were using specific attention strategies.

4.4.2.5 Study limitations

There were two key limitations that need to be considered. First was the large time frame over which advertisements were sourced. This study included all advertisements that could be found during 2008-2015 from a range of different sports betting companies. This large time frame meant that there was an unequal number of advertisements from each company. The other limitation with using such a large time frame was that the same sports betting companies were not present for the whole duration of the data collection period. For example, some brands emerged such as Ubet and Crownbet, and the rebranding of Centrebet, TomWaterhouse and Sportingbet into the international betting company William
Hill, resulted in all of these company advertisements being included within the analysis.

Second, is the source of the data for the study. Using YouTube as a way of collecting the advertisements could also be considered a limitation as the timestamp that was used to decide if advertisements were played on television during the included time period may not be an accurate representation of when they were actually aired on television. This then limited the ability to map advertising campaigns and compare the content and style of advertisements over time. Using online sources also resulted in advertisements not being able to be downloaded. In the future commercial advertising data may be beneficial to obtain advertisements.

4.4.3 Study Three: The role of sport as a normalising and socialising agent for sports betting

4.4.3.1 Overview of Study Three


The study aimed to identify not only where young people (8-16 years) had seen sports betting advertisements but also how this influenced their attitudes. This study was guided by four research questions:

1. What is the extent to which young people and parents recall seeing sports betting promotions?
2. Where do they recall seeing these promotions?
3. What do they specifically recall about sports betting promotions during sporting matches?
4. Do young people perceive that betting is being normalised as part of sport, and which factors do they describe as contributing to this?

This mixed methods study was embedded within a larger study, which explored the implicit recall of gambling sponsorship in sport, and general attitudes towards sports betting advertising during sport [Thomas et al., 2016]. Ethical approval was received from the University of Wollongong Human Research Ethics Committee and a modification to include questions relating to this project was then submitted and approved (I did not play a role in the ethics application process).

4.4.3.2 Recruitment and setting

The broader study aimed to recruit one parent and one child aged 8-16 years. This age range was important to include, as the first study in this thesis found that adolescents (14-18 years) had very strong and detailed attitudes regarding gambling advertising, and the second study found that there were a range of strategies within betting advertisements that were known to be appealing to young people of different ages.

The setting for this study was junior AFL, NRL and soccer events, as well as professional AFL and NRL matches. The AFL and NRL were identified as being two Australian sporting codes that were heavily saturated with sports betting gambling advertising and have had particular links with sports betting companies through sponsorship, and broadcaster relationships [Canning, 2016; Gardner, 2014]. Some soccer sites were included to act as a control group, as the sport does not have such prominent links with gambling companies in Australia. This study was conducted at nine different locations, with the majority of data collection taking place in NSW. Recruitment occurred at junior and professional sporting events. This was because the study aimed to explore environments that were heavily saturated with sports betting advertising and to recruit young people who were more likely to be engaging with sporting broadcasts.
4.4.3.3 Data collection

Data collection occurred during April-August 2015. Parents and their children completed a 10-15 minute survey, separately to ensure that neither parent nor child could see or hear the responses. Each family received a $20 iTunes voucher at the completion of the survey.

The survey began by asking young people and parent’s general demographic questions such as age and postcode, and their level of sporting engagement and sports viewing frequency. Viewing of sport was identified using a Likert scale with responses ranging from “Never” to “All the time”. Participants were then asked if they could remember seeing a sports betting advertisement. Participants who could remember a sports betting advertisement were then asked to complete the child friendly activity. In this study an A3 picture board was used to stimulate discussion about the places where parents and young people had seen or heard sports betting advertisements. The picture board contained images of different community or media environments, including television, sporting stadium, radio, billboard, public transport, websites, media devices, and newspaper. A betting venue was added after data collection had commenced as a few children had said unprompted that that was a location they had seen betting advertisements. After piloting, some environments were also grouped together. The language used to describe the environments was also modified. For example, the term ‘internet’ was changed to ‘websites’, and ‘phones’ and ‘laptops’ was changed to ‘media devices’. After participants had selected the environments and completed the activity, a digital photograph was taken (Figure Two). This was to ensure the capacity to identify which environments young people had selected and so that this could be used to count the amount of environments selected.
**Figure Two:** Example of a completed A3 picture board activity
The next section of the interview included questions about participant’s awareness of sports betting such as recall of sports betting brand names, advertisements and their own gambling behaviours. Participants were also asked specifically about the sports betting advertisements they had seen during sport and researchers promoted participants with “in the game, e.g. on jerseys/around the stadium/pop ups after a try or (ii) during the broadcast (specific commercials/crosses to betting officials/during half time.” The last question included in this study was about normalisation. Given that Study One showed that adolescents were demonstrating gambling language and in some cases felt as though betting could be linked with fan loyalty, participants were asked if they thought gambling was a normal or common part of sport. They were then asked to describe why or why not they thought this. Short notes were taken from the participants instead of recording the direct responses.

4.4.3.4 Data analysis

The quantitative and qualitative data were separated and analysed using different techniques. The quantitative data were imported into SPSS, a statistical software package. Descriptive statistics were performed to identify general demographic data, gender, location (NSW/Victoria), amount of young people within each age group (8-11 years and 12-16 years), and from each recruitment site: AFL, NRL and soccer. SEIFA was determined based on postcode data from parents. Frequencies were then calculated to identify viewing frequency, recall of sports betting promotions, the amount of times different environments were selected, and the amount of young people who thought sports betting was a normal or common part of sport. These questions were analysed by recruitment location, child or parent and in some instances by age, using a Chi square test for relationships. Qualitative data were analysed using thematic analysis whereby responses were read as a whole and compared between recruitment location and age to determine the common themes that were emerging.
4.4.3.5 Study limitations

This study included a number of limitations. This study compared young people who were attending AFL, NRL and junior soccer matches, however the soccer sample was significantly smaller than the other groups. This limitation is something that should be explored in future studies to identify the true effect of exposure to different sports that have varying levels of sports betting advertising within broadcasts. Recruiting young people who attended local sport may not necessarily mean that they are active in watching professional sport (which contains gambling advertising), however the large proportion of young people who had said they had seen sports betting advertisements on television suggested that young people were still exposed. As the study used prompts that engaged young people and in some instances reminded young people of places they had seen sports betting advertisements, it may have also exaggerated some memories or encouraged some young people to select places where they may not have actually seen sports betting advertising before. The use of a prompt was nonetheless an important tool for this study and due to young people’s detailed descriptions of locations and plot lines of sports betting advertisements, this made us confident that the data produced was still accurate. It also appeared to be a time efficient way of collecting data, as the surveys lasted approximately 10-15 minutes.

4.4.4 Study Four: The influence of sports betting advertising on young people’s attitudes, knowledge and consumption intentions

4.4.4.1 Overview of Study Four

https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-017-0136-3

The fourth and final study in this thesis involved qualitative interviews with young people aged 8-16 years old. This study aimed to explore the different factors that were influencing young people’s gambling attitudes, behaviours, and knowledge about gambling.

The research questions that were used to guide Publication Four included:

1. Are there specific socialisation factors that may positively influence young people’s understanding and perceptions of the popularity of specific gambling products?
2. Do some factors appear to be more influential than others in shaping young people’s gambling attitudes and consumption intentions?
3. How can public health strategies be used to reduce the harms associated with socialising agents which are particularly influential in positively shaping young people’s gambling attitudes and consumption intentions?

The research questions that were used to guide Publication Five included:

1. To what extent do young people recall specific appeal strategies within advertisements, and are they able to distinguish promotions used by different brands?
2. Are there factors within advertising that may create an exaggerated perception that sports betting is a common or normal activity for sports fans?
3. Does advertising influence young people’s technical knowledge about betting?
4. Are there specific factors relating to advertising which may influence young people’s willingness to engage in betting on sport?
A high-risk ethics application was submitted to the University of Wollongong Human Research Ethics Committee and was approved on the 27th November 2015 [Application number: HE15/359]. Following the transfer to Deakin University, the project was required to go through the Deakin University Human Research Ethics Committee with a previously approved application. This approval was received on the 16th of March 2016 [Application number: 2016-064]. Each child received a $30 gift voucher for their participation.

4.4.4.2 Recruitment and sampling

The aim of this study was to recruit young people aged between 8-16 years old who were self-identified AFL fans and lived in Melbourne. We wanted to include young people who were fans of the AFL because of the strong sponsorship relationships and advertising deals the AFL has with sports betting companies [Gardner, 2014]. This was also because of the findings from Study Three, which demonstrated that young people who were recruited from AFL sporting stadiums and junior sporting events had significant knowledge and recall of sports betting advertising.

We advertised for participants through our existing networks, and then used snowballing strategies to diversify the sample. We also posted the advertising material to community groups and sporting organisations.

4.4.4.3 Data collection

Data collection occurred over a four month period (April-July) in 2016. This time period was chosen to ensure that the AFL season had begun so that there was a greater chance young people would have been exposed to a number of AFL broadcasts. The interview schedule was designed to last between 20-30 minutes. In practice we found that most young people kept to this time depending on how well they understood the questions or the amount of knowledge that they had. However there were a few children whose interviews last around 45-60 minutes, which was usually due to the amount of detail they were providing.
The interview schedule contained two main sections, with a number of subsections under each. The first section sought to document young people’s current gambling behaviours, their knowledge and attitudes of gambling products, and the factors that influenced their sports betting consumption intentions. Child friendly methods were used to explore these factors. Three picture boards were used. The first board contained eight pictures of gambling products: casino games, EGMs, horse racing, Keno, lotteries, raffles, scratch tickets, and sports betting. The second board contained six pictures of different groups of people: athletes, children, men, older adults, teenagers, and women. The third board contained six pictures of different sports: AFL, basketball, cricket, NRL, rugby union, and soccer. These boards were used as prompts to answer questions such as “which of these products do you think is most popular”, “which product would you most like to try”, “which group of people do you think would most likely to bet on sports”, and “which sport do you think people would bet on the most?” (See Figure Three, Four, and Five for examples.)
Figure Three: Example of a completed picture board representing which gambling products a child thought were most popular
Figure Four: Example of a completed picture board representing which group of people a child thought would bet on sport the most
Figure Five: Example of a completed picture board representing which sports a child thought people would bet on the most
The second section of the interview explored young people’s recall, attitudes and interpretations of sports betting advertisements they had seen. Young people were asked to describe advertisements, to recall sports betting brand names and any specific deals or promotions, and if there was anything they thought would appeal to adults or young people. Participants were asked questions such as “what things do you remember about the ad (plot lines, characters, or what they said) or what can you remember the most?” Young people were also asked if there were strategies within advertisements that might encourage people to gamble, or made gambling seem less risky and a normal part of sport, for example, “sports betting companies use lots of different advertising strategies that encourage people to gamble. When thinking about the ads that you have seen for sports betting, was there anything in the ads that might make kids want to gamble? What about when they are older?” Finally young people were asked to describe the different aspects of sports betting advertisements that they liked or did not like. Another aspect of this section of the interview was the way sports betting advertisements might be teaching young people about gambling. Young people were asked to describe how someone would bet on sports, the different markets available and their understanding of the term odds. Young people were then asked how they knew this information, with a specific emphasis on advertising.

The interview schedule was modified throughout the data collection process, predominantly relating to the different prompts that were asked of children and the wording of questions. For example, some of the questions were changed to be about other people’s gambling habits instead of their own, such as “if you wanted to gamble on sport, how would you do that?” to “if someone wanted to gamble on sport, how do you think they would do that?” This enabled children to become more comfortable providing information, rather than their answers being misinterpreted to imply that they wanted to do this themselves.

4.4.4.4 Data analysis

Data analysis of this study took a thematic approach. Braun and Clarke [2006] define thematic analysis as “identifying, analysing, and reporting patterns (themes) within data” [p. 6]. Braun and Clarke [2006] outlined the process of
thematic analysis with six steps, which included reading the data, creating initial codes, identifying themes, reviewing themes, and defining themes. Constant comparative analysis was also implemented, as transcripts were read and re-read throughout data collection to ensure that all themes presented could be applied to the interviews [Glaser, 1965]. I transcribed the initial interviews so that I could understand how the interview schedule was working and the data that was being collected. This allowed for any modifications to the interview schedule to occur. A professional transcription company was then used for the remainder of the interviews. These transcripts were uploaded to NVivo where the data were managed. As a professional transcription company was used it was important that I had thoroughly read the transcripts. Open coding was used to understand the very basic themes that were occurring within the data. Then more nuanced themes were created to provide a detailed representation of the data. Data were separated out into two sections, which produced two peer reviewed publications (Publication Four and Five).

The first analysed the data by looking specifically at the factors that were contributing to young people’s attitudes towards gambling products, their current gambling behaviours, and current and future consumption intentions. This project explored the consumer socialisation principles of family, friends and media. The second, explored young people’s recall and attitudes towards sports betting advertisements and their sports betting knowledge, including descriptions of odds, betting markets and how someone would place a bet. The aim of this publication was to identify the role of advertising in young people’s creation of attitudes and technical knowledge of sports betting.

4.4.4.5 Study limitations

There were three key limitations of this study. The first, was the small sample of girls in this study. Future research should attempt to encourage female participation in gambling research, and understand the factors that influence gambling consumption intentions in girls and young women. Second, the sample was not from a highly diverse background, with many children living in higher SEIFA areas. Future studies could compare the attitudes and behaviours of young
people from different socio economic and geographical backgrounds. Finally, children were included in this study if they were a self-identified AFL fan. This meant that there was a variety of levels of engagement with AFL games, for example going to games and watching multiple games per week, to watching a game here and there.

4.5 Methodological learnings: Conducting gambling research with young people

During this thesis, young people’s attitudes and behaviours were the central focus of most of the research studies. On reflection of these studies there were a number of key methodological learnings that can be taken from the research conducted.

4.5.1 Engagement

Research has shown that interviewing young people can be difficult, however there is growing evidence about the use of specific techniques that can encourage and empower young people within research interviews [Kirk, 2007]. Kirk [2007] describes the benefits of creating ‘active participants’ where participants are able to engage with the research method. It is also important to acknowledge that young people develop in different ways and respond differently to stimuli. Engagement with the research through the use of activities encourages children to feel as though they are in control of the interview, can relax, and can provide an opportunity for further discussion [Noble-Carr, 2006]. In the third study of this thesis, an A3 picture board was created which contained eight pictures of different environments in which young people may have seen or heard sports betting advertising before. The picture boards were used as a visual stimulus for young people to think about. Although this may have inflated some young people’s responses, in many instances it was able to prompt young people to think about different occasions on which they could remember seeing the advertisements. It was usually accompanied with an anecdote: for example, one child recalled a trip he had taken with his family where he remembered seeing a sports betting advertisement on a billboard.
4.5.2 Language

Language and the way that questions have been formulated has been identified as a particularly important aspect of conducting research with young people. Kortesluoma and colleagues [2003] describe the importance of identifying common language that young people prefer to use when discussing particular topics. This is to ensure that young people are best able to actively respond to questions and to interpret the questions correctly. The language used when describing gambling required careful consideration. Colloquial terminology was used to ensure young people had a better understanding or were more familiar with terms such as ‘sports betting’, ‘pokies’, and ‘scratchies’. There were some instances where it was obvious young people did not understand particular questions or terms, and so different language or examples were used to explain these terms.

In qualitative research it was important to record these discrepancies to ensure that the full context of responses were acknowledged. These techniques were consistent with the literature, which recommends not taking young people’s original answers at face value and further exploring many of the answers that young people provide. For example, young people would often respond to questions with “I don’t know”, yet either instantly elaborate, or as the interview progressed reveal the answer. To ensure greater clarity, if a child seemed unsure they would be asked if their responses had been correctly interpreted, which often provided an opportunity for the participant to explain further what they had meant [Kortesluoma et al., 2003].

As this thesis included young people aged between 8 – 16 years old, it was also important to ensure language was altered depending on how old the child was, or how well the participant was able to understand different terms. Young people demonstrated varying levels of ability. For example, some younger children were very advanced in their communication skills and confident with their attitudes and opinions, while other younger children were very shy and did not have as coherent responses. Some older children were more cautious of their responses. These were considerations that needed to be responded to while conducting the interviews, and
resulted in the interviewer having to adapt interviewing style and language within the interview. This included in the way questions were asked and the language that was used.

4.5.3 Research etiquette and persona

A formal interview process can be quite daunting and intimidating for young people. It was important when we interviewed young people in any environment that we appeared casual and friendly, to ensure that a similar atmosphere was presented to the child. Although there were formalities that needed to be adhered to, researchers while interviewing young people were often in casual clothing, and tried to engage young people with informal conversations in order to try and build a rapport with the participant [Irwin and Johnson, 2005]. This was again to make the child feel more comfortable while talking with researchers. In Study Four, most interviews were conducted in the family home, often in a lounge room or dining room. We know that once young people are comfortable they are more likely to be able to express themselves [Irwin and Johnson, 2005]. In Study Three, we were positioned at local and professional sporting events; this location was also beneficial to the study as young people could see other children participating, which encouraged others to be inquisitive and to also want to engage. Surveys were also conducted separately from parents, which allowed for more open answers.

4.6 Ethical considerations

This thesis included three studies that required different levels of ethical approval from the University Human Research Ethics Committee. I was not involved in Study One and Three ethics applications and Study Two did not require ethical approval. I was involved throughout the submission and management of the ethics application and implementation of Study Four. Each study posed a number of ethical considerations that needed to be identified and managed. The following two categories summarised the main ethical considerations as they related to children and how they were overcome.
4.6.1 Young people’s participation in sensitive research

In all studies that included talking to and interviewing young people (Studies One, Three and Four), it was important to ensure that all material was suitable for the different young people we were speaking to. This can be challenging when interviewing a large age range of young people, however we ensured that all questions that were asked were able to be interpreted by children as young as eight years old. In some instances modifying questions accommodated this or the language that was used and the inclusion of different activities to the interview schedule was used to engage young people.

Gambling can also be considered a sensitive topic to discuss, especially for young people who may not have been exposed to this product or had discussions about it before, especially compared to other public health topics such as alcohol, drugs and safe sex. Gambling can also be a topic that reminds people of the harm that can result whether in relation to the harm that they have experienced themselves or by other people that they know. It is important that people are provided with the correct service information if the interview does bring up any feelings of distress to ensure that they are aware of where to access these services. The process also ensured the option to stop the interview at any time without any consequences (for example, participant gift vouchers, information on gambling help services if required, or any relationships built with the researchers or university), to ensure that people felt comfortable throughout the interview.

4.6.2 Informed consent

Informed consent was an ethical consideration that needed to be ensured when interviewing adults and young people. A systematic review by Huang and colleagues [2016] defines informed consent as “an interactive process between subject and researcher involving disclosure, discussion, and a complete understanding of a proposed research activity, and which culminates in the individual freely expressing a desire to participate” [p 350]. However they describe the difficulties in obtaining informed consent from young people, as
young people are not often at a maturity level where they can interpret the information provided. This is why parental consent for young people was initially sought. In Study Four, it was deemed by the ethics committee that young people who were 12 years and over would have the capacity to sign for their own consent, after their parents had given consent for their participation. Although we had parental consent, the study was verbally explained to all young people involved before the interview to ensure that they were aware of the requirements of the study. All participants were provided with all of the necessary information and were able to ask questions in order for them to feel comfortable in giving their consent for the study.

4.7 Chapter summary

This chapter has provided an overview of the methods of each of the four studies within this thesis. It then presented some of the methodological learnings experienced while conducting gambling research with young people and described the key ethical considerations of the thesis. The following chapters will present each of the peer reviewed publications resulting from thesis studies.
Chapter 5. Initiation, influence, and impact: Adolescents and parents discuss the marketing of gambling products during Australian sporting matches

5.1 Chapter overview

This chapter contains the first publication in this thesis titled ‘Initiation, influence, and impact: Adolescents and parents discuss the marketing of gambling products during Australian sporting matches’. This publication was submitted to BMC Public Health, an open access journal, with a Q1 ranking. It was first published on the 13th of September 2016.

5.2 Author declaration

1. Details of publication and executive author

<table>
<thead>
<tr>
<th>Title of Publication</th>
<th>Publication details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation, influence, and impact: Adolescents and parents discuss the marketing of gambling products during Australian sporting matches.</td>
<td>BMC Public Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of executive author</th>
<th>School/Institute/Division if based at Deakin; Organisation and address if non-Deakin</th>
<th>Email or phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah Pitt</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td><a href="mailto:hpitt@deakin.edu.au">hpitt@deakin.edu.au</a></td>
</tr>
</tbody>
</table>

2. Inclusion of publication in a thesis

<table>
<thead>
<tr>
<th>Is it intended to include this publication in a higher degree by research (HDR) thesis?</th>
<th>Yes</th>
<th>If Yes, please complete Section 3 If No, go straight to Section 4.</th>
</tr>
</thead>
</table>

3. HDR thesis author’s declaration

<table>
<thead>
<tr>
<th>Name of HDR thesis author if different from above. (If the same, write “as above”)</th>
<th>School/Institute/Division if based at Deakin</th>
<th>Thesis title</th>
</tr>
</thead>
<tbody>
<tr>
<td>As above</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td>Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions</td>
</tr>
</tbody>
</table>

If there are multiple authors, give a full description of HDR thesis author’s contribution to the publication (for example, how much did you contribute to the conception of the project, the design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)

Hannah Pitt significantly contributed to all aspects of the manuscript. She led the analysis of the data and prepared the first draft of the paper. She also led the drafting and revision process of the manuscript.

I declare that the above is an accurate description of my contribution to this paper, and the contributions of other authors are as described below.

Signature and date: 20.11.17

Signature Redacted by Library

4. Description of all author contributions

<table>
<thead>
<tr>
<th>Name and affiliation of author</th>
<th>Contribution(s) (for example, conception of the project, design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Samantha Thomas contributed to all aspects of the study and manuscript including the study design, data collection, drafting of the manuscript and critical revisions.</td>
</tr>
<tr>
<td>Amy Bestman, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Amy Bestman contributed to the data analysis and critical revisions of the manuscript.</td>
</tr>
</tbody>
</table>
5. **Author declarations**
   I agree to be named as one of the authors of this work, and confirm:
   
   i. that I have met the authorship criteria set out in the Deakin University Research Conduct Policy,
   
   ii. that there are no other authors according to these criteria,
   
   iii. that the description in Section 4 of my contribution(s) to this publication is accurate,
   
   iv. that the data on which these findings are based are stored as set out in Section 7 below.

   If this work is to form part of an HDR thesis as described in Sections 2 and 3, I further

   v. consent to the incorporation of the publication into the candidate’s HDR thesis
      submitted to Deakin University and, if the higher degree is awarded, the subsequent
      publication of the thesis by the university (subject to relevant Copyright provisions).

<table>
<thead>
<tr>
<th>Name of author</th>
<th>Signature*</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas</td>
<td>[Signature Redacted by Library]</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Amy Bestman</td>
<td>[Signature Redacted by Library]</td>
<td>22 Nov 2017</td>
</tr>
</tbody>
</table>

6. **Other contributor declarations**
   I agree to be named as a non-author contributor to this work.

<table>
<thead>
<tr>
<th>Name and affiliation of contributor</th>
<th>Contribution</th>
<th>Signature* and date</th>
</tr>
</thead>
</table>

   * If an author or contributor is unavailable or otherwise unable to sign the statement of authorship, the Head of Academic Unit may sign on their behalf, noting the reason for their unavailability, provided there is no evidence to suggest that the person would object to being named as author.

7. **Data storage**
   The original data for this project are stored in the following locations. (The locations must be within an appropriate institutional setting. If the executive author is a Deakin staff member and data are stored outside Deakin University, permission for this must be given by the Head of Academic Unit within which the executive author is based.)

<table>
<thead>
<tr>
<th>Data format</th>
<th>Storage Location</th>
<th>Date lodged</th>
<th>Name of custodian if other than the executive author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic files</td>
<td>Deakin University</td>
<td>Various</td>
<td>Samantha Thomas</td>
</tr>
</tbody>
</table>

This form must be retained by the executive author, within the school or institute in which they are based.

If the publication is to be included as part of an HDR thesis, a copy of this form must be included in the thesis with the publication.
Initiation, influence, and impact: adolescents and parents discuss the marketing of gambling products during Australian sporting matches

Hannah Pitt*, Samantha L. Thomas and Amy Bestman

Abstract

Background: Harmful gambling is a significant public health issue. Alongside the rapid diversification of gambling products, are rapid increases in the marketing for specific types of gambling products, such as online wagering. While concern has been raised about the impact of gambling promotions during sporting matches on the gambling beliefs and behaviours of adolescents, very little research has explored adolescents’ and parents’ attitudes towards the marketing of gambling products within sport.

Methods: A qualitative study was conducted with 59 family groups comprising of at least one parent and one adolescent (14–18 years old) in Victoria, Australia. Parents and adolescents were interviewed separately and asked questions relating to their gambling attitudes and behaviours. They were then brought together, and advertising reception techniques were utilised to prompt discussions about the marketing of gambling during sport. A thematic approach to analysis was used, constantly comparing similarities and differences between and across groups.

Results: Three main themes emerged. First, was initiation of sport as a platform for the promotion of gambling. Adolescents perceived that the use of embedded promotions (for example during the match) and the use of athletes in gambling promotions were significant mechanisms for creating an alignment between gambling companies and sporting teams and codes. Second, was the influence of marketing messages in creating a perception that gambling was always accessible, and was an integral part of the sporting experience. Third was the impact of marketing messages on adolescent’s discourses about sport. Parents described that they had noticed that wagering, and ‘odds’ discussions, had become embedded in adolescents narratives about sporting matches.

Discussion and conclusions: Gambling marketing during sport has significantly increased. While the gambling industry states that it does not aim to intentionally target young people, adolescents are increasingly aware of the relationship between gambling and sport. Future research should explore the impacts and influence of gambling promotions during sport on the gambling attitudes and consumption intentions of adolescents. Effective public health policy is needed to develop comprehensive regulatory frameworks to protect young people from unnecessary exposure to the marketing for this potentially harmful adult product.

Abbreviations: AFL, Australian football league; NRL, National rugby league; SEIFA, Socio economic areas for index

* Correspondence: hpitt@deakin.edu.au
Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Deakin University, Geelong, Australia

© 2016 The Author(s). Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated.
**Background**

Gambling is increasingly recognised as an important public health problem that may cause significant health and social [1–6] harms for individuals, their families, and communities. Every year, over 400,000 Australian adults experience or are at risk of experiencing harm from gambling [7]. Importantly, for every person that develops harm from gambling products or services, up to ten others are also negatively impacted [7]. Researchers now estimate that the harms associated with gambling are now on a par with other major public health issues, such as alcohol and major depression [8].

While gambling is not traditionally seen as a consumption activity that may pose significant risks for young people (as compared to other similar activities such as alcohol consumption), research suggests that young people are at increased risk of harmful patterns of gambling as compared to adults [9–11]. Australian research shows that about half of all young people will have participated in gambling by 15 years of age, with about three-quarters participating by the age of 19 [12, 13]. Some studies suggest that about 4.0 % of Australian adolescents experience harm from gambling [14, 15], although it is important to note that these studies pre-date the newer forms of gambling, such as online sports wagering. Despite these figures, there is still very limited understanding of young people’s pathways into gambling. Researchers suggest that there may be a range of individual, socio-cultural and environmental factors that may lead to young people’s first experiences with gambling, and may lead some young people to be at increased risk of developing harm with gambling [16]. However, very limited research has explored how gambling industry tactics, such as marketing and the alignment of gambling with culturally valued activities such as sport, may influence young people’s gambling beliefs and consumption intentions [17, 18].

While most gambling products are available in land based environments, concerns have been raised about the growing number of gambling options that are provided via online environments, such as sports based wagering [19]. Wagering is the only form of gambling in Australia to have shown an increase in participation rates in the last decade, and is particularly appealing to young adults. For example in 2014, 10.56 % of 18–24 year olds, and 8.25 % of 25–34 year olds participated in sports and events wagering in the state of Victoria [20]. There may be a number of reasons for this increase in participation, including the ease and 24/7 accessibility of online gambling products, the competitive marketing environment for wagering products on both traditional and social media channels, the lack of a comprehensive regulatory environment for the marketing of wagering products, and the alignment of bookmakers with Australia’s elite sporting codes.

Standard Media Index (SMI) figures from 2011 to 2015 indicate a 160 % increase in advertising spend on gambling (and predominantly sports wagering) in Australia, with $236 million spent on advertising in 2015 [21]. While television advertising for some gambling products (such as Electronic Gambling Machines) is prohibited, there are comparatively very few restrictions relating to the marketing for sports and event wagering in Australia [22]. In 2008, after a High Court ruling in favour of bookmaker Betfair Pty Ltd, registered bookmakers were able to be registered in one part of Australia, while promoting their products in another [22]. Most of Australia’s bookmakers are registered in the Northern Territory, which has caps on taxation, and significantly fewer restrictions on the range of promotional tactics (such as incentives and inducements) that may be used by wagering companies to market their products [23]. While some states and territories prohibit some of these specific promotional strategies, they are still able to be promoted throughout Australia, with ‘fine print’ terms and conditions statements informing customers that the promotion is unavailable in their particular state.

While there is a broad national Australian Commercial Television Code of Practice [24] that details a range of requirements that gambling advertisements need to meet, these requirements have been criticised for not adequately addressing the content of gambling advertisements. For example, while the Code states that gambling advertisements must be socially responsible, must not contain children, must not make gambling appear to be a way of success or achievement, and must contain a statement relating to ‘responsible gambling’ or help services for problem gambling [24], there is very limited specific detail beyond this. There are also few regulations specific to promotions on social media sites such as Facebook and Twitter, with bookmakers regularly using social media sites during matches to provide live commentary based updates on sporting matches, memes, cartoons and funny videos, alongside prompts to bet [25]. Furthermore, there are significant inadequacies relating to the timing of wagering advertising. While the Code stipulates that gambling advertisements are not allowed to be played on television during the ‘watershed’ which replicates children’s viewing hours (4–7 pm), significant loopholes within these regulations means that gambling advertisements are able to be played during the ‘watershed’ if they are within a news, current affairs or sports program [24].

There are also very few restrictions relating to sponsorship relationships between gambling companies and sports codes. Online bookmakers and casinos have sought to establish alignment with Australia’s elite sporting codes.
via multi-million dollar sponsorship relationships. While exact monetary figures are rarely disclosed, media reports have suggested a $50 million sponsorship deal between the Australian Football League (AFL) and official gambling partner Crown Bet [26], and a $60 million sponsorship deal between Sportsbet.com.au and the National Rugby League (NRL) [27]. The marketing impact of these sponsorship deals is clearly demonstrated in match based marketing outside of formal television advertisements, including signage around the ground, wagering and casino company logos on match jumpers, and score board advertisements [22, 28]. Sponsorship deals also have an impact on customer sign ups to bookmaker accounts. For example, after a reported $5 million sponsorship deal with the Australian Open tennis tournament, William Hill chief executive James Henderson stated that the partnering had led to “record customer acquisition rates” with a reported 1000 customer sign ups per day during the 2 week event [29].

Despite some policy efforts aimed at curbing sports wagering marketing during sporting matches [24], it has been argued that the ‘gamification’ of sport means it is now almost impossible to avoid the marketing of sports wagering products whilst watching professional sport [22, 30]. Similar to the arguments made about the regulation of tobacco out of sport, researchers argue that there is an ethical tension that exists when sport is heavily marketed as being a ‘family friendly’ activity (and is watched by significant numbers of adolescents) [28], but also contains significant promotions for gambling products that may be ultimately harmful for young people. This is primarily because of the positive associations young people form between products and brands that are associated with sport.

Tobacco control researchers clearly demonstrated that the promotion of tobacco during sport had a significant impact on young peoples “subconscious positive associations” between tobacco and sport [31] [pg. 499]. This included young people’s awareness of cigarette brands, and their subsequent consumption preferences for these brands [32]. Similar normalisation trajectories have been shown in young people’s brand awareness of gambling products and companies that sponsor or are advertised during sport. For example, studies suggest that young people demonstrate both brand recall and preference for gambling products that are aligned with sporting teams and codes [33], and state that one of the environments in which they most see marketing for wagering is during sporting matches [18]. A recent study also suggested that young people who are fans of particular sporting codes – in particular the AFL and NRL – may have a higher awareness of wagering promotions than children who follow other sports (such as soccer) [18]. What is less clear from existing research is detailed information about how young people perceive the relationship between gambling and sport. Furthermore, very limited research explores parents’ perceptions of the promotion of gambling within sport.

Methods

The data derived from this study was part of a larger study investigating Victorian families attitudes towards gambling, including gambling marketing [34]. The broader study investigated perceptions of the causes and consequences of problem gambling, discussions about gambling in social networks, conceptualisations of the risks and benefits of gambling, interpretations of gambling marketing (including lotteries, casinos, horse racing, and wagering), and the effectiveness of mandatory warning messages. For this current paper, we aimed to specifically explore how adolescents and their parents described the processes, influences and impacts of the marketing of gambling within sport on the gambling beliefs and behaviours of young people. To do this, we explored the existing data set utilising three clusters of research questions:

1. How do young people and their parents describe the relationship between gambling and sport? What factors may influence these perceptions?
2. How do young people interpret the messages they see about gambling during sport?
3. Is there evidence to suggest that young people are increasingly viewing sport through a ‘gambling lens’?

Recruitment of family groups

Family ‘groups’ comprised of one parent and at least one adolescent child (14–18 years old) were recruited to participate in the study. More than one adolescent child was able to participate in the family. Similarly more than one parent was able to participate in the study (although there was not a situation in which more than one parent participated). A commercial market research company was employed to help to recruit the families. The role of the company was to contact the family to assess interest in being involved in the research. If they agreed, they were then contacted by the research team who explained the study in more detail, provided written information, and sought consent from participants. A staged process was used whereby the company was asked to contact families in numerical ‘blocks’. As initial data analysis occurred and greater insight was gained into the data, the company was asked to approach families with more specific characteristics (for example, specific genders, or ages). This is consistent with qualitative research methods, whereby the sample is continuously recruited during data analysis. Written consent was requested and obtained prior to the start of the interview from the parent, and verbal consent was obtained from the
adolescent at the beginning of the interview. After the interview, each family group was given a $100 grocery voucher as a reimbursement for the time spent participating in the study. Sampling was stopped when a range of concepts relating to the initial key themes of inquiry were able to be illustrated [35]. Ethical approvals were received from the University Human Research Ethics Committee and the Victorian Department of Justice Ethics Committee.

Data collection
Interviews were conducted in the family home using a predominantly qualitative data collection method, involving advertising reception techniques to prompt discussion. Interviews lasted between 45 and 120 min (with longer interviews indicative that more than one adolescent in the family had participated). Two researchers attended the interview. This was firstly for safety reasons, but also so that data could be collected in a more efficient way. The process for the interview involved two stages.

First, the parent and adolescent(s) were separated and each completed an interview about their socio-demographic and gambling characteristics; their perceptions of gambling in the community; how they discussed gambling in their social networks; their attitudes towards different forms of gambling, and how they described the risks and benefits of gambling. Parent and adolescent(s) were separated to ensure that there was not undue pressure on adolescents to answer the questions in a certain way. Parents and adolescent(s) were then brought back together to participate in the second half of the study. This utilised visual sociology techniques, whereby examples of gambling promotions from different types of gambling companies (lotteries, casinos, horse racing, and wagering) were shown to the family group to prompt discussions about different types of gambling, and the marketing for these products. Some of these promotions were very overt — for example a bookmaker standing on a professional sporting ground giving the ‘odds’ for a sporting event, through to incidental promotions for gambling, including an advertisement for a casino complex that showed table games as one of a broad range of activities within the casino. Adolescent(s) were asked for their comments before the parents, and we randomised the order that the promotions were shown to avoid an ordering effect [36].

Data analysis and interpretation
A professional transcription company transcribed audio-recordings of the interviews. Quantitative data were entered into SPSS and analysed using basic descriptive statistics, and QSR NVivo ten was used to manage the qualitative data. The first step in the analysis was to separate the data which related to our key research questions. To do this, HP used initial coding to establish analytical ‘fit’ and ‘relevance’ of the data as it related to the research questions. Charmaz [37] describes this process as constructing codes and developing them into categories that “crystallize participants’ experience” (fit), and creating an analytical framework that interprets what is happening in the data and “makes relationships between implicit processes and structures visible” (relevance) [pg. 54]. HP read the transcripts line-by-line; carefully highlighting the aspects of the interview that related to sports based wagering, the promotion of wagering during sport (hereinafter referred to as sport), or narratives that related to young people viewing sport through a gambling lens. We met regularly as a group, drawing the main themes and subthemes on a whiteboard, discussing how this related to other sections of the interview, to ensure that the context of responses would not be distorted by separating out the data about gambling and sport from the rest of the data. We paid particular attention to the language that was used by participants, and used codes to form the building blocks for our theory. We constantly took notes and discussed these within the team [37], and discussed key differences and similarities between adolescents and parents. We initially compared responses within the parent and adolescent groups, and then compared across the parent and adolescent groups. We looked for similarities and differences in themes. We then used more focused coding techniques to group our initial coding categories and explain larger segments of the data (and to form broad themes and subthemes). This process required significant discussion and decision making between the group and we met regularly to discuss and group the distinct concepts and categories within the data. Finally, we progressed to theoretical coding in which the key concepts and links within the data were illustrated. Here we developed three initial theoretical codes of ‘initiation’, ‘influence’, and ‘impact’. We then expanded on these theoretical codes by utilising a thematic framework (Fig. 1) initially proposed by Attride-Stirling [38] and developed into a diagrammatic depiction of key themes and subthemes by Thomas and colleagues [39]. This method analyses the data by creating lower level themes or ‘basic’ themes, using these basic themes to form organising themes, and using the organising themes to identify the overall global theme from the data [38].

Results
Sample characteristics
A total of 59 parents and 61 adolescents were interviewed across 59 family groups. The sample was distributed relatively evenly across each of the socio
economic areas of index (SEIFA) tertiles – low \( n = 20, 33.9 \% \), medium \( n = 16, 27.1 \% \), and high \( n = 23, 39.0 \% \). The majority of parents had completed high school or tertiary education \( n = 48, 81.4 \% \). About two-thirds had an income of less than $100,000 per annum \( n = 38, 64.4 \% \). Most parents were mothers \( n = 47, 79.7 \% \) with a median age of 48 years \( n = 47.7, \text{ range } 30–60 \text{ years} \). Just over half of the adolescents in the sample were males \( n = 33, 54.1 \% \), with a median age of 16 \( n = 16.4, \text{ range } 14–18 \text{ years} \).

**Qualitative analysis**

The overall themes and subthemes derived from the data are presented in Fig. 1.

**Initiation - the use of sport as a platform for the promotion of gambling**

Descriptions from both parents and adolescents indicated that gambling, and more specifically wagering, was becoming embedded within sport. Three main subthemes emerged from the data.

**The saturation of gambling marketing during sporting matches**

The first was how gambling was regularly promoted during sporting matches, inherently linking sports and wagering together. Parents perceived that sporting matches were “saturated” with advertising and thought that the advertising was “imposing on your viewing time of the actual event”. On the whole, parents expressed very negative attitudes about the quantity of gambling, and in particular sports wagering promotions, during sports. Negative descriptions from parents ranged from calling the advertisements “annoying”, to more moralistic descriptions, with one participant calling the gambling promotions “evil”. Parents described hearing and seeing promotions for sports based wagering on television, the radio, live pop ups during the broadcast, on the scoreboard, and on the big screens at sporting matches. They were particularly concerned how this constant exposure to sports wagering advertising would impact negatively on young peoples’ gambling attitudes and behaviours. For example, the following mother commented:

“I think anything that’s in your face often enough can be a concern [for children]. Constant saturation makes us less conscious of the problems, I feel that we become desensitised to it.” - 57 year old mother

Adolescents also commented on the extent of gambling marketing they had seen during sporting matches. Many adolescents perceived that there was an inherent association between gambling and sport. This perception was influenced by seeing promotions for gambling (and in particular wagering) “all the time” or “constantly” during sport, with some adolescents using the word...
“everywhere” to indicate the volume of promotions during sporting matches. Similarly to parents, adolescents had observed the temporal placements of advertisements (for example at half time or breaks in play, and when attending sporting matches) and were also able to recall physical placements of gambling promotions during the match (for example, on signage around the ground and on the big screens at sporting grounds). Most young people referred to the promotion of sports based wagering rather than promotions for other forms of gambling, with some adolescents stating that it was very difficult to avoid being exposed to these promotions during sport. Some stated that the presence of promotions created a natural interest in gambling and in the content of the promotions. For example, the following adolescent stated that although he was not interested in gambling, he was unable to avoid viewing gambling advertisements when he attended football matches:

“I’m just thinking of the game. Like when I go to the footy, they always have ads and you just sit there and watch them because you’re interested, well not that you’re... but that’s the only thing.” - 17 year old male adolescent

The symbolic alignment of gambling with sports fan loyalty
The second subtheme to emerge was the symbolic alignment of gambling, and in particular sports wagering, with concepts of fan and team loyalty. Parents described how the promotional tactics used by sports wagering companies sought to embed sports wagering as part of the emotive aspects of the sporting experience, or as one parent described it, “the passion of the game”. Parents perceived that these promotions also tried to encourage wagering as something that “a typical fan” would engage in as a natural part of watching a sporting match. A few parents stated that the creatives within advertising particularly targeted sports fans, and used gambling as a vehicle for making fans feel as though they were “part of the team” or “part of the experience” during a sporting match:

“If you want to be a part of the team you can be a member [of that team], but if you really want to be part of it you have to bet, and even at the game you can still bet on your phone and things like that.” - 41 year old mother

Some adolescents also described how the creatives within some wagering promotions were linked to concepts of fan loyalty. For example, some adolescents interpreted that the creatives in wagering promotions were encouraging individuals to gamble, thus showing support for a particular sports team. Adolescents described how very specific types of gambling promotions, such as logos on team jumpers could create a perception that gambling and the team were aligned with each other. For example, the following adolescent perceived that linking sponsorship with a sporting team helped to “justify” gambling and lessened the perceptions of risk associated with the activity. He also commented that gambling logos on jumpers made this relationship between the gambling sponsor and the team more noticeable:

“I think if you have [jersey sponsorship] then you notice it. And then I guess it kind of does justify the idea. Like, if [the football team is] backing it then it can’t be that bad.” - 15 year old male adolescent

However, one adolescent believed that betting would give him a reason to be engaged in the game. He stated that if he bet against his team, and his team lost, that this would still mean that he enjoyed the game:

“It gives me something to be happy about if my team loses, because I bet against my team. I think that I have a good understanding about soccer to know that I could know the right result. Like an educated guess.” - 17 year old male adolescent

The promotion of wagering by sporting stars and commentators
The third subtheme relating to the use of sport as a platform for the promotion of gambling was the use of celebrities and athletes to promote gambling. Some parents and adolescents perceived that current and ex-sports stars were used in sports wagering promotions to increase perceptions of trust and the credibility of products. They also perceived that the use of commentary style gambling promotions (whereby an ex-player, gambling representative, or match commentator promoted gambling during a sporting match) was more convincing, trustworthy and authentic than a promotion for gambling that did not use this type of advertising strategy. More parents expressed concern about the use of former athletes or sports commentators in the promotion of sports wagering. Some had strong negative views about this form of promotion, using words such as “insidious” and “destructive”, and perceived that this was particularly deceptive and influential for young people. This was predominantly because they perceived that young people would trust without question the messages about gambling particularly from current or former athletes, and would not realise that there was a company behind the message. Some stated that this was
because young people (and some adults) idolised and respected athletes:

“…you probably trust the commentator. They are an ex-footballer that you respect…You put more faith in what they say than a politician any day…it’s seamless…To me this is the most insidious, most destructive.” - 48 year old father

Adolescents also perceived that when the information about wagering ‘odds’ was given by a former athlete or sports commentator, it created a perception that the ‘odds’ of the match were based on the opinions of an expert who had a detailed knowledge of the sport and the match. Some adolescents commented that when messages about sports wagering, and in particular the ‘odds’, came from current or former athletes, they were more likely to trust the messages within the promotions. This is because they were “legends” and knew more about sport than “the average person”:

“Because [ex-players] normally know everything about sport and maybe even betting…” - 17 year old male adolescent

Adolescents also described that the appearance of athletes in the promotions for sports wagering created a perception that they were “connected heavily” to gambling, and that they “supported” or “were part of it”. As such, promotions created a perception that athletes were not just promoting the product, but they were also engaged in gambling.

**Influence - key promotional messages within sports based gambling promotions**

The second key theme from the data were the key messages contained within promotions linking gambling with sport. Four main subthemes emerged from discussions:

**An easy way to win money**

The first key message that both parents and adolescents described was the way sports wagering advertising depicted the product as an “easy way to win” or to receive financial gain. Parents spoke about the way sports wagering promotions portrayed gambling as easy. Parents were particularly concerned with the way this messaging may impact on adolescent’s perceptions about this activity. For example, some parents thought that the advertising strategies insinuated that “you’re always going to win” and would give adolescents a “false sense that if they gamble they might win”:

“I am [concerned] because I’m sure there would be lots of kids that would pay attention to the [advertising] and who would see it and think it just sounds so easy, a dollar here, a dollar there and you might win big.” - 45 year old mother

Adolescents said that they thought companies “made it look like you’re going to win”, “say that you can win money”, “show how much you can win” and they “show people really happy with money”. For example, one female adolescent when describing the particular creatives for a wagering advertisements, recalled a man saying “come bet with our company we have the best ‘odds, you’ll probably win”. However, some older adolescents were more sceptical about the messages that they recalled within wagering commercials. For example, the following 18 year old stated:

“Sportbet says to place your bets. They say you’ll never lose. But I don’t think that’s completely true.” - 18 year old male adolescent

**Linking gambling with the emotion of the game**

Overall parents and adolescents perceived that sports wagering promotions suggested that gambling on sport was fun and exciting. Parents commented that gambling promotions which linked gambling with the “atmosphere” of the game made gambling appear exciting and could be particularly influential in encouraging individuals to gamble on the match. For example, after viewing an advertisement that showed an AFL team preparing for a match, and leading up to the first bounce of the game, a parent stated that he felt motivated to gamble. This was because of the way in which the advertisement captured the emotion and excitement of the lead up to the game:

“If an ad was to make me feel like wanting to bet, that one would. Because that feeling of excitement and belonging and glory and going out there on the sporting field type of thing, that buzz, that’s what it really communicated. And I was feeling that buzz, you know it really was a powerful ad.” - 48 year old father

Adolescents also spoke about the creatives within specific sports wagering advertisements. Some adolescents described that the individuals in the advertisements looked like “they were having fun” and others thought that it made “gambling seem like an exciting thing to do”. For example, the following adolescent stated that advertisements for sports wagering gave an impression that you would win, and it was a fun activity to engage in:

“Ads for sports betting tell you to bet with them and make it look like you’re going to win. They make it look positive and fun.” - 15 year old male adolescent
Linking technology with accessible gambling
The third theme to emerge from the data was that promotions, in particular for sports wagering, made gambling seem accessible and available. Parents and adolescents discussed how sports wagering advertising showcased the availability and accessibility of the product through the promotion of technology. Some parents stated that they were concerned that adolescents were ‘at risk’ from gambling because of the link between marketing for products and the accessibility of these products through mobile technologies and websites. Parents talked about the fact that “everyone’s got gadgets” and some of the advertising emphasised that you could gamble from “the luxury of your own home”. For example, one mother stated that young people were technologically ‘savy’ and their understanding and ability to use modern day technology could potentially lead adolescents to new gambling opportunities:

“... the new [gambling service] you can use on your phone. [Adolescents] are phone savvy. They are addicted to that stuff. Now you can bet 24 h a day if you want to. I don’t think it’s good.” - 48 year old mother

Adolescent boys in particular recalled that they had seen marketing that talked about the ease of online gambling, provided incentives to open online accounts, and informed viewers about how to access gambling websites. One boy said they “show you how to gamble very clearly”. A few adolescents recalled that advertisements for wagering companies encouraged you to ‘sign up’ to an online account, to “bet live” and demonstrated how to access online gambling websites and mobile phone apps by “saying that they have apps on the phone and they are easy to use and you can use them everywhere”.

Adolescents also described how they saw people using mobile devices during sports wagering advertisements. This made them feel like they were being encouraged to bet and as though people could bet on their phone, “anywhere, anytime, anyplace”. Some adolescents particularly described the link with mobile phone technology. Participants spoke about “gambling at the footy” because “everyone has an iPhone these days” and, “if you’re at the game, you can just do it.”

Intertwining gambling with the game
Finally, participants perceived that gambling promotions encouraged individuals to use gambling as a way of being part of, or more connected to the game. Parents described how sports wagering companies promoted the perception that placing a bet on a favourite team added to ‘the whole experience of being a football follower’ and encouraged the mentality that through gambling you become “part of the game”. Some parents perceived that this might be problematic for younger fans who may be susceptible to this type of marketing. One parent said:

“Because they’re right there, so yeah, I think it’s [a concern], I think they’ve tried to intertwine it too much, to make it part of the routine of the game.” - 44 year old father

Responding to an advertisement that promoted discussion about the sponsorship alignment of sports wagering companies with specific sporting teams, adolescents perceived that wagering sponsorship of a team, and promotions aligned to that team, would ultimately lead people who follow or support that team to want to gamble with the advertised company.

Impact - engaging in sport through a gambling lens
The final theme demonstrated the way adolescents and parents perceived that sport was increasingly viewed through a ‘gambling lens’. There were two subthemes within this theme. The first that gambling was increasingly normalised as an ‘everyday’ part of sport, and the second that gambling discourses had started to influence the way in which individuals, and young people talked about sport.

An ‘everyday’ part of sport
Parents perceived that gambling was becoming a normalised part of sport. Many attributed this to the excessive promotion of gambling and in particular sports wagering within sport. Some parents thought that this would have a significant impact on the future gambling behaviours and gambling consumption intentions of adolescents. Words such as “normal”, and “normalised” appeared regularly within parents’ narratives. For example, the following parent commented:

“It is almost as if they are doing everything possible to normalise gambling and for it to seem such a nice, natural, everyday part of sport. I mean how can you watch a game without having a few dollars on it? That is normalisation.” - 48 year old father

Other words used by parents described the way in which promotions created an implicit relationship between gambling and sport. Parents used words such as “subliminal” and “brainwashing” to describe the covert way in which marketing was impacting on adolescents and was contributing to the normalisation of sports wagering during sport. This included a perception that promotions for gambling played during sporting matches, and incorporating sports teams or players,
would create positive attitudes towards gambling. One mother described the amount of exposure children may have to sports wagering promotions, and how this may influence young people's gambling consumption intentions:

"[I’m] quite concerned. I think children do watch a lot of television, are exposed to a lot of media. They are bombarded by it really. And it becomes more and more normalised. I think especially now that more and more gambling is tied to things that used to be fun, family activities like football and ... it's just seeping in more and more. So that that association between, rather than just going for fun to watching a game, to have that financial interest in it. It's a social time bomb waiting to happen." - 42 year old mother

Although adolescents didn't specifically use the term 'normalise,' the way they described sports wagering indicated that they thought that sports wagering was becoming a typical or usual part of sport. For example, adolescents described how the quantity or extent of sports wagering marketing within or before sporting matches could make it seem that gambling was something that everyone did during sport.

There was also some confusion for adolescents about whether a promotion for gambling was a distinct episode of marketing, or whether it was part of the sporting match. For example, when shown a promotional clip of a sports wagering spokesperson on a football field talking about 'odds,' some adolescents did not believe that this was a promotion, but viewed this as being "part of the game" or "part of the show". Some adolescents were unable to understand the persuasive intent of 'odds' promotions, and believed that they were there to provide people with information about the game, rather than encouraging them to gamble:

"I see it more part of the game. It's information on the game, it's like anything. They do possession, passes and stuff like that, like how far a player has run. It's kind of just become part of that." - 15 year old male adolescent

Similarly, the following female adolescent believed that 'odds' promotions were not encouraging individuals to gamble, but were simply providing information about the sporting match:

"That's just giving you the information. That's all I want. I just want someone to tell me what the 'odds' are or the information is, and then if I want to bet I can. They're not forcing you to bet." - 16 year old female adolescent

**Discussing sport via gambling discourses**

The second theme related to the way in which gambling discourses had shifted the way young people described and discussed sports. Parents stated that they believed that the promotion of 'odds' had changed young peoples' interactions with sporting matches. For example, parents reported that they noticed that instead of talking about the statistics associated with their favourite teams, or their favourite players, young people talked about the 'odds' of sporting matches:

"I hear kids quoting 'odds' now. That's a concern with advertising that it's that background filter and it becomes a bit more of a norm to the general population." - 47 year old father

Our data analysis also revealed that many adolescents discussed the term 'odds' during the interview. Some adolescents said that they discussed the "sporting 'odds,' and what [sic] team are at what [sic] 'odds" when talking with their friends and/or family. Others recalled that 'odds' were promoted in a variety of different ways, including the display of changing 'odds' during sporting matches, and whether or not a company had "the best odds" for a particular event. Adolescents were also able to describe what they thought the 'odds' meant. Most adolescents interpreted 'odds' as an indicator of whether a team was likely to win: "If they're [sporting team] going to win or not" or "If a team is more likely to win then the 'odds' would be lower because there's a greater chance that they're not going to give away as much money".

**Discussion and implications for public health**

This exploratory study provides information about the range of factors that may influence how young people may interpret and apply the messages that they see about gambling during sport. The study aimed to understand: 1) How adolescents and their parents describe the relationship between gambling and sport, and the factors that may influence these perceptions; 2) How adolescents interpret the messages they see about gambling during sport; and 3) Whether there is evidence to suggest that adolescents are starting to view sport through a 'gambling lens'.

The findings from this study raise a number of points for discussion.

First, adolescents and parents in this study were aware of the increasing alignment of gambling and sport. Most commonly, this perception was related to the promotion of gambling products within sporting matches. While a range of gambling products and services are promoted during sporting matches – including casinos, keno, and lotteries – the type of gambling that was referred to the most by participants in this study were promotions for...
sports wagering. This is perhaps unsurprising given that researchers have highlighted the saturation of promotions for these products in sporting matches – both during traditional commercial break advertising, and embedded within match play via promotions such as logos on jumpers, signage at the ground, pop ups, and tickers [22, 28]. Studies have also shown that children are able to recall and link sports wagering and gambling companies with specific sporting teams and codes [17, 33], have a high unprompted recall of gambling brands [17, 18], and can recall and describe seeing advertisements during sport for specific sports wagering companies [18]. This study contributes to these previous studies by demonstrating that adolescents have an awareness of promotions outside of traditional commercial break advertising, that they are able to describe the content of these specific promotional tactics, as well as the timing or placement of these promotions during sporting matches. Furthermore, the study demonstrates that adolescents perceived that the use of current and ex-athletes in either the implicit or implied endorsement of gambling products is a particularly influential tactic in aligning gambling with sport. Research from other public health issues has shown the influence that celebrities and athletes can have on adolescent’s uptake of behaviours and attitudes towards harmful products [40, 41]. Further research should explore whether the endorsement of gambling products by current or ex-athletes plays a role in positively shaping young peoples’ gambling beliefs, brand preferences and consumption intentions.

Second, while gambling companies repeatedly argue that adolescents are not the target of their promotions [42], and that parents should be responsible for educating their children about gambling, this study suggests that parents are increasingly concerned about the excessive promotion of, in particular, wagering advertising in sport. Our findings suggest that parents may feel that they are unable to counter the persuasiveness and volume of promotions for gambling, particularly when they are aligned with concepts associated with supporting your team or fan loyalty. While those involved in the promotion of gambling products in sport (including sporting codes, broadcasters and the gambling industry) have done little to address these concerns, public health practitioners should aim to work with parents to ensure that their opinions and concerns are regularly heard by these agencies, and to advocate for change [43]. Further research should more comprehensively investigate the range of possible regulatory responses to gambling advertising within sports-based programming to ensure that this type of marketing does not negatively influence vulnerable populations. While the most obvious way forward is to close regulatory loopholes, which allow gambling to be advertised within children’s viewing hours if they are within sporting matches [22], this study suggests that policy makers should consider how they expand regulatory frameworks to encompass a wider range of promotions that may occur outside of traditional commercial break advertising. One idea, as suggested in limiting the exposure of alcohol marketing to children, may be to develop an audience threshold for promotions, whereby gambling promotions are banned or significantly restricted if the number of young people in an audience is over a certain number or percentage of the viewing audience [44]. It is important that these initiatives are developed independently of those companies or organisations that may have a commercial interest in the promotion of gambling products. Tobacco control also provides an important historical template for public health policy makers to follow. By 1976 direct tobacco advertising was banned in Australia, with further bans occurring during the 1990’s to restrict the sponsorship of sport by the tobacco industry [45]. It is widely regarded that this approach, as part of a comprehensive approach specifically targeting all advertising mechanisms, contributed to a decrease in the uptake and prevalence rates for smoking [45, 46].

Third are the messages that adolescents interpret from the gambling promotions they see within sport. Adolescents in this study interpreted the messages about sports wagering, as being easy, accessible, and fun. Research from other gambling product advertising (such as lotteries) have also shown that the messages of winning and that gambling is easy, are recalled and viewed positively by children and adolescents [47, 48]. Derevensky and colleagues (2010) described that these types of promotions are influential in young people’s reasons for wanting to engage in gambling [48]. While our study did not specifically explore the impact of these promotions on consumption intentions, this is an important area for future consideration. This should include understanding how promotions that highlight the role of technology may influence gambling consumption intentions in young people.

Finally, parents were particularly concerned about promotions that implied that gambling was part of supporting a team. Marketing techniques, which aim to embed sports wagering as a ritual within sport may have an influence on children’s ability to recall gambling brands and their brand preference [17, 18, 33]. While there is an assumption that adolescents are generally able to understand the persuasive intent of marketing (in this case that marketing for gambling is encouraging individuals to gamble) [49], adolescents struggle to identify ‘odds’ announcements as marketing techniques used to encourage gambling, with some seeing it as information about the potential outcome of a game. This raises questions about whether discourses from the gambling
industry which seek to embed gambling as an inherent part of sport, are shaping young people’s attitudes towards gambling. Language is a factor that plays a significant role in the shifting of social norms, particularly relating to the consumption of unhealthy products [50, 51]. There were some indications in this study that young people’s discourses about sport increasingly involve discussions about gambling, and in particular gambling ‘odds’. Further research should explore the range of mechanisms that may be contributing to a normalisation trajectory of gambling as an inherent and accepted part of the sporting experience, and whether some groups of young people may be particularly influenced by specific mechanisms.

It is important to acknowledge the study limitations. Firstly, this is an exploratory study, and the study findings cannot claim to represent the attitudes and opinions of all adolescents who watch sport and their parents. The study did not aim to provide a representative sample of all Australian households, but to generate a range of attitudes and opinions about gambling. A further limitation of this study was that the parental sample was skewed towards mothers. Given that men more frequently participate in gambling on sport, it may be that a larger sample of fathers may have yielded different results. The exclusion of non-English speaking participants is also a limitation. Finally, given that this is a new area of discussion for many young people and their parents, we used advertising materials to prompt discussion about some very specific forms of marketing, such as ‘odds’ announcements. Future research should also seek to examine unprompted or implicit awareness and interpretation of these types of promotions.

Conclusions

The findings from this study provide an important starting point for more comprehensive investigations about the impact and influence of gambling marketing during sporting matches on adolescents. This study suggests that there may be a process whereby marketing is used to initiate a link between gambling products and sport, influence the belief that gambling is an integral part of sport, and create an impact on the use of gambling discourses to discuss and describe sport. We would conclude that these processes may be shaping a normalisation trajectory in which adolescents believe that gambling is a normal and valued consumption activity during sport, which may in turn influence their consumption intentions. As with other areas of public health, effective public health policies and advocacy strategies will form an important part of a comprehensive public health response to gambling harm. Engaging young people and their parents in developing solutions will be an important part of this response. Public health practitioners have many historical templates from other areas of public health (such as tobacco control) with which to develop comprehensive research and policy responses to gambling industry marketing strategies.

Acknowledgements

We would like to acknowledge the members of the community who participated in this study.

Funding

This study was funded by the Victorian Responsible Gambling Foundation’s Grants for Gambling Research Program. Hannah Pitt receives a PhD scholarship as part of an Australian Research Council Discovery Grant on Sports Wagering [DP140102210].

Availability of data and material

This data will not be made available to ensure the privacy and confidentiality of the participants.

Authors’ contributions

HP: PhD student. Led the development of the analytical framework for the study and data analysis, prepared the first draft and critical revision of the paper. ST: Study Chief Investigator. Contributed to data collection, analysis and interpretation, writing and critical revision of the study. AB: Contributed to the analysis of data, drafting and critical revision of paper. All authors read and approved the final manuscript.

Competing interests

The authors declare that they have no competing interest.

Consent for publication

Participants consented to the data being used for publications.

Ethical approval and consent to participate

Ethical approval was obtained from the University Human Research Ethics Committee and the Victorian Department of Justice Ethics Committee. Parent’s provided written consent and verbal consent was obtained from adolescents.

Received: 11 April 2016 Accepted: 30 August 2016
Published online: 13 September 2016

References


Submit your next manuscript to BioMed Central and we will help you at every step:

- We accept pre-submission inquiries
- Our selector tool helps you to find the most relevant journal
- We provide round the clock customer support
- Convenient online submission
- Thorough peer review
- Inclusion in PubMed and all major indexing services
- Maximum visibility for your research

Submit your manuscript at www.biomedcentral.com/submit
Chapter 6. Do betting advertisements contain attention strategies that may appeal to children? An interpretative content analysis

6.1 Chapter overview

This chapter contains the second publication in this thesis titled ‘Do betting advertisements contain attention strategies that may appeal to children? An interpretive content analysis’. This publication was submitted to the Health Promotion Journal of Australia, with a Q2 ranking. It was first published on the 3rd of January 2018. The publication license to present this publication within the thesis can be found in Appendix B.

6.2 Author declaration

1. Details of publication and executive author

<table>
<thead>
<tr>
<th>Title of Publication</th>
<th>Publication details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do betting advertisements contain attention strategies that</td>
<td>Health Promotion Journal of Australia</td>
</tr>
<tr>
<td>may appeal to children? An interpretive content analysis.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of executive author</th>
<th>School/Institute/Division if based at Deakin; Organisation and address if non-Deakin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah Pitt</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:hpitt@deakin.edu.au">hpitt@deakin.edu.au</a></td>
</tr>
</tbody>
</table>

2. Inclusion of publication in a thesis

<table>
<thead>
<tr>
<th>Is it intended to include this publication in a higher degree by research (HDR) thesis?</th>
<th>Yes</th>
<th>If Yes, please complete Section 3 If No, go straight to Section 4.</th>
</tr>
</thead>
</table>

3. HDR thesis author’s declaration

<table>
<thead>
<tr>
<th>Name of HDR thesis author if different from above. (If the same, write “as above”)</th>
<th>School/Institute/Division if based at Deakin</th>
<th>Thesis title</th>
</tr>
</thead>
<tbody>
<tr>
<td>As above</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td>Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions</td>
</tr>
</tbody>
</table>

If there are multiple authors, give a full description of HDR thesis author’s contribution to the publication (for example, how much did you contribute to the conception of the project, the design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)

Hannah Pitt significantly contributed to all aspects of the study. She contributed to the study design, data collection, led the analysis of the data, and prepared the first draft of the paper. She also led the drafting and revision process of the manuscript.

I declare that the above is an accurate description of my contribution to this paper, and the contributions of other authors are as described below.

<table>
<thead>
<tr>
<th>Signature and date</th>
<th>20.11.17</th>
</tr>
</thead>
</table>

Signature Redacted by Library

4. Description of all author contributions

<table>
<thead>
<tr>
<th>Name and affiliation of author</th>
<th>Contribution(s) (for example, conception of the project, design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas,</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, analysis, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Centre for Population Health</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, analysis, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Research, School of Health</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, analysis, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>and Social Development,</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, analysis, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Faculty of Health, Geelong,</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, analysis, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Victoria, Australia.</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, analysis, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Amy Bestman,</td>
<td>Amy Bestman contributed to the interpretation of the data and critical revisions of the manuscript.</td>
</tr>
<tr>
<td>Centre for Population Health</td>
<td>Amy Bestman contributed to the interpretation of the data and critical revisions of the manuscript.</td>
</tr>
<tr>
<td>Research, School of Health</td>
<td>Amy Bestman contributed to the interpretation of the data and critical revisions of the manuscript.</td>
</tr>
<tr>
<td>and Social Development,</td>
<td>Amy Bestman contributed to the interpretation of the data and critical revisions of the manuscript.</td>
</tr>
<tr>
<td>Faculty of Health, Geelong,</td>
<td>Amy Bestman contributed to the interpretation of the data and critical revisions of the manuscript.</td>
</tr>
<tr>
<td>Victoria, Australia.</td>
<td>Amy Bestman contributed to the interpretation of the data and critical revisions of the manuscript.</td>
</tr>
</tbody>
</table>
5. Author declarations
I agree to be named as one of the authors of this work, and confirm:

vi. that I have met the authorship criteria set out in the Deakin University Research Conduct Policy,

vii. that there are no other authors according to these criteria,

viii. that the description in Section 4 of my contribution(s) to this publication is accurate,

ix. that the data on which these findings are based are stored as set out in Section 7 below.

If this work is to form part of an HDR thesis as described in Sections 2 and 3, I further consent to the incorporation of the publication into the candidate’s HDR thesis submitted to Deakin University and, if the higher degree is awarded, the subsequent publication of the thesis by the university (subject to relevant Copyright provisions).

<table>
<thead>
<tr>
<th>Name of author</th>
<th>Signature* and date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Amy Bestman</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Melanie Randle</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Mike Daube</td>
<td>22 Nov 2017</td>
</tr>
</tbody>
</table>

6. Other contributor declarations
I agree to be named as a non-author contributor to this work.

<table>
<thead>
<tr>
<th>Name and affiliation of contributor</th>
<th>Contribution</th>
<th>Signature* and date</th>
</tr>
</thead>
</table>

* If an author or contributor is unavailable or otherwise unable to sign the statement of authorship, the Head of Academic Unit may sign on their behalf, noting the reason for their unavailability, provided there is no evidence to suggest that the person would object to being named as author

7. Data storage
The original data for this project are stored in the following locations. (The locations must be within an appropriate institutional setting. If the executive author is a Deakin staff member and data are stored outside Deakin University, permission for this must be given by the Head of Academic Unit within which the executive author is based.)

<table>
<thead>
<tr>
<th>Data format</th>
<th>Storage Location</th>
<th>Date lodged</th>
<th>Name of custodian if other than the executive author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excel file</td>
<td>Deakin University</td>
<td>Various</td>
<td>Samantha Thomas</td>
</tr>
</tbody>
</table>

This form must be retained by the executive author, within the school or institute in which they are based.

If the publication is to be included as part of an HDR thesis, a copy of this form must be included in the thesis with the publication.
Do betting advertisements contain attention strategies that may appeal to children? An interpretative content analysis

Hannah Pitt MPubHlth1 | Samantha L. Thomas PhD1 | Amy Bestman BPubHlth (Hons)1 | Melanie Randle PhD2 | Mike Daube BA (Hons)3

1Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Deakin University, Geelong, Vic., Australia
2School of Management, Operations and Marketing, University of Wollongong, Wollongong, NSW, Australia
3Faculty of Health Sciences, Curtin University, Perth, WA, Australia

Correspondence
Hannah Pitt, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Deakin University, Geelong, Victoria, Australia.
Email: hpitt@deakin.edu.au

Funding information
ST, HP and MD receive funding for gambling research from the Australian Research Council and the Victorian Responsible Gambling Foundation. The Victorian Responsible Gambling Foundation is funded via hypothecated taxes from gambling. ST receives consultancy funding from the Australian Football League Players Association and Sportsready for gambling harm prevention education for professional athletes. MR and AB receive funding for gambling research from the Victorian Responsible Gambling Foundation.

Abstract

Issue addressed: Concerns have been raised about the expansion of sports betting marketing and the impact it may have on children’s gambling attitudes and behaviours. This study aimed to investigate the content of Australian betting advertisements to identify if they contained specific attention strategies that have been identified by tobacco, alcohol and gambling researchers as having particular appeal to children.

Methods: An interpretative content analysis of 91 advertisements from 11 corporate bookmakers was conducted. A search of specific attention strategies that may appeal to adults, but also have been demonstrated in the public health literature as having particular appeal for children was used to develop a coding framework. This framework was then applied to analyse the advertisements. Descriptive statistics were used to generate quantitative data and qualitative illustrations were used to provide examples of the strategies found within the advertisements.

Results: On average there were 7.6 attention strategies found per advertisement. The most common attention strategies were music (n = 80), voiceovers (n = 79) and catchy slogans (n = 78). There were some attention strategies that related specifically to betting, such as technology, and risk-reducing promotions.

Conclusion: This research has demonstrated that the content of betting advertisements contains attention strategies that, based on the research findings from other areas of public health, may have particular appeal for children.

So what? This research provides important evidence which could encourage researchers, regulators and policy makers to consider changes to current advertising regulations, to ensure children are protected from the potentially engaging and harmful attention strategies present in betting advertisements.

KEYWORDS
advertising, betting, children, gambling, sports betting

1 | BACKGROUND

1.1 | Sports betting in Australia

Sports betting is a relatively new form of online gambling in Australia, and is the form of gambling with the most rapid increases in participation and product consumption in young men.1 This form of gambling has been suggested as being particularly pervasive because of the 24/7 availability via online sites and mobile apps, the saturation of marketing for these products, and the alignment of betting with Australia’s major sporting codes and teams.2,3 While researchers have identified how a range of strategies which are used to promote sports betting may have a particular impact on the gambling attitudes and behaviours of young men,4 many argue that these same...
promotions may also have an impact on shaping the betting attitudes of children.\textsuperscript{5,6} Research has sought to understand how children interpret the messages that they see within betting promotions.\textsuperscript{2,5} However, there has been limited investigation regarding how the attention strategies used within betting advertisements to appeal to adults may also have particular appeal to children.\textsuperscript{7} This is a clear gap given that there are very few regulatory mechanisms that seek either to prevent children from being exposed to advertising for sports betting products, or to regulate specific forms of marketing for these products that may have additional appeal for children. For example, current regulatory codes which prevent gambling from being promoted in children’s viewing hours also contain loopholes which allow the promotion of these products within sporting matches, sports shows, news, and current affairs programs.\textsuperscript{8} Similarly, agreements to prevent advertisers from using tactics that may appeal to children (such as cartoons) within gambling promotions are limited to industry self-regulatory Codes of Conduct,\textsuperscript{9} with few enforceable penalties. This raises questions about whether current regulatory frameworks may have fully considered the range of strategies used within gambling promotions, and how these attention strategies may impact upon children.

1.2 Attention strategies in tobacco, alcohol and gambling marketing: The impact on children

Attention strategies have been described by Sutherland and Sylvestor (2008) as aspects in advertising material that “grab” the attention of audiences to try to ensure people take an interest in the messages contained within.\textsuperscript{10} Although not necessarily the only component that contributes to the viewer responding positively to the advertisement, this is necessary in building brand preference and recall.\textsuperscript{10} Different types of attention strategies are used depending on who the marketer is targeting, with sex, humour, controversial material, testimonies, music and jingles the most common types of strategies used in advertising.\textsuperscript{10} Research from other areas of public health, such as tobacco and alcohol, has highlighted that children may find some of these attention strategies particularly appealing.\textsuperscript{11-17} For example researchers have demonstrated the extent to which some advertising attention strategies—including music, voiceovers, animals, humour, sound effects, and social and sporting success—may have a particular influence on shaping children’s attitudes and consumption intentions towards potentially unhealthy products.\textsuperscript{11,13,14,18} Some of the most influential strategies are characters and cartoons.\textsuperscript{11} For example, the use of character Joe Camel in tobacco advertising increased the positive response attributed by children to Camel cigarettes from 0.5% to 32.8% after the introduction of the character.\textsuperscript{11} Some researchers have investigated how attention strategies within gambling advertising may appeal to children and influence their gambling attitudes and intentions.\textsuperscript{19-22} Researchers have identified similar strategies to those identified in tobacco and alcohol campaigns, including humour, the alignment with sport, music, celebrity or athlete endorsements, voiceovers and sound effects.\textsuperscript{20,21} However, there are additional strategies within gambling advertising, particularly relating to winning money, that are different to those found in tobacco and alcohol campaigns. Researchers argue that these types of attention strategies influence children’s perceptions that gambling can be easy and can lead to financial rewards.\textsuperscript{19,20,23,24} Sproston and colleagues [2015] explored the effect of betting advertising on adolescent males, with some adolescents believing that advertising may encourage children to be “future customers” [p. 118].\textsuperscript{23} However, this study did not seek to explicitly examine the range of advertising strategies that may specifically appeal to young people.

To date there have been few comprehensive studies which have sought to identify whether there are strategies used within betting advertisements which children may find particularly appealing.\textsuperscript{7} This study aims to address this gap by exploring whether betting advertisements contain similar attention strategies to those identified in other areas of public health, and within gambling research, which may have particular appeal amongst children. In doing so, the study aims to provide information: (i) to guide future research aimed at identifying how specific advertising attention strategies may shape children’s betting attitudes and consumption intentions and (ii) to encourage consideration of regulatory frameworks to address the content of betting promotions which may have a particular influence on children.

2 METHODS

2.1 Sample

Corporate bookmakers were originally identified using existing literature that has explored betting marketing,\textsuperscript{7} while other bookmakers were found through general Internet searches. The advertisements used in this study were identified by searching corporate bookmaker websites and YouTube channels, and via Google searches (including words such as “sports betting ads,” “Australian sports betting advertisements,” and other variations of these words). This study did not aim to include all advertisements that had been produced by corporate bookmakers during 2008-2015, but instead analysed those that were available and showcased a range of different advertising campaigns. To be included, an advertisement needed to have the following two characteristics:

1. Have a video date stamp between 2008 and 2015. This represented the approximate time from when betting advertisements first appeared across Australian states and territories.  
2. Contain a responsible gambling message. This is a statement mandated by the Australian states and territories that must appear on all televised gambling advertisements in Australia.\textsuperscript{8} As many of the companies are also based in other countries, the responsible gambling message allowed us to distinguish if an advertisement was played in Australia. We excluded advertisements without a responsible gambling message.

We included advertisements for both sports and horse based betting, and excluded videos for tipping competitions, fantasy sports,
and those based on panel discussions or bookmaker market updates because these did not constitute formal advertisements.

A total of 91 advertisements were identified from 11 corporate bookmakers: Bet365.com.au, Betfair.com.au, Centrebet.com.au, Crownbet.com.au, Ladbrokes.com.au, Sportingbet.com.au, Sportsbet.com.au, TAB.com.au, TomWaterhouse.com, Ubet.com.au, and WilliamHill.com.au. Most of these companies did not operate across the complete sampling period, as new companies entered the market, and others ceased to operate during the sample timeframe. Data collection stopped when no new advertisements could be found from the search terms that had been used. Ethical approval was not required for this study.

2.2 Development of the coding framework

The coding framework was developed using a deductive approach. First, we reviewed published academic literature relating to advertising strategies which may have a particular appeal for children. We then narrowed the search to look only for research articles from other unhealthy commodity industries, which are restricted for purchase among children (such as tobacco and alcohol). The gambling literature was then searched to identify if strategies also appeared within gambling literature, and if there were any other strategies that were not identified in tobacco and alcohol studies. Some of the published literature on this topic determined the effectiveness of attention strategies by conducting research with children which asked them about what they liked or found engaging about advertisements, and the strategies that could encourage their current or future product use. Once the themes were established the evidence was summarised relating to why these types of attention strategies may appeal to children. This resulted in 16 attention strategies identified. Descriptions of each of the attention strategies were then defined, as they would apply in the sports betting context (Table 1).

2.3 Application of the coding framework and data analysis

An interpretive content analysis was conducted. To analyse the data, quantitative and qualitative techniques were used. The first three authors independently applied the coding framework across 20 advertisements. Coding for each of the advertisements was based on a binary (“yes/no”) framework, meaning that the advertisements were observed for the appearance of each attention strategy from the coding template and if the strategy appeared it was recorded. For example, a code of “yes” for “characters” would indicate that a character appeared at least once in the advertisement. Strategies were only recorded as being present or absent rather than documenting if the attention strategy occurred multiple times within the advertisement.

Researchers then compared and discussed their results and interpretations of the coded advertisements to ensure there was consistency and agreement when coding. The coding framework was then applied across the next 71 advertisements by Author One. If Author One or any of the coders were unsure about the categories or how this would be applied to an advertisement, these were discussed with the broader research team for consensus. Frequency counts and percentages were used to describe the advertisements associated with each betting company. While the main focus of the study was to quantify the number of strategies, we also sought a number of qualitative examples as illustrations of the different types of strategies in each category. The primary aim of this was not to provide a comprehensive qualitative analysis but rather to complement the quantitative results, to highlight the range of different types of strategies used, and as a guide for researchers who may seek to replicate or extend this study.

3 RESULTS

The frequency with which each attention strategy was found to be used by corporate bookmakers is presented in Table 2. In total, the specific attention strategies under investigation were identified 688 times. All advertisements contained at least one attention strategy, with each advertisement containing, on average, 7.6 attention strategies. The brand with the highest average number of attention strategies per advertisement was Sportingbet.com.au (mean attention strategies per advertisement = 9.2, total number of attention strategies used by company = 83) and the brand with the lowest average number of strategies used per advertisement was Bet365.com.au (mean attention strategies per advertisement = 4.0, total number of attention strategies used by company = 8).

3.1 Attention strategies using audio

The types of strategies most frequently used were audio-based, in particular music (n = 80, 87.9%), voiceovers (n = 79, 86.8%) and catchy slogans (n = 78, 85.7%). Music (n = 80, 87.9%) was the attention strategy that was used in almost 90% of advertisements. Many advertisements played up-beat, catchy, popular songs, or used music to convey excitement and suspense. Prominent examples of the use of music were in advertisements for Centrebet.com.au, with one advertisement containing the well-known Australian song “Black Betty” by Spiderbait which contains a strong and fast beat, while another used suspenseful music and a heartbeat throughout the advertisement.

Most advertisements also featured distinctive voiceovers (n = 79, 86.8%). The most recognisable was the voiceover in many of the advertisements for Sportsbet.com.au, who spoke in a strong Australian male accent and used casual and colloquial language to engage listeners. Phrases included: “You gotta love this time of year”, “If you’ve nailed four out of five on your multi” and “Sportsbet. Easier, Betterer [sic].”

Canny slogans (n = 78, 85.7%) were also regularly used, with slogans often linked to a series of advertisements. For example, TomWaterhouse.com advertisements contained slogans such as “First past the post,” and “I know what punters want.” Centrebet.com.au also used the short and easy to remember slogan “Fire up” in three of the advertisements and “Don’t just watch it” in a further three.
<table>
<thead>
<tr>
<th>Attention strategy</th>
<th>Evidence</th>
<th>Betting adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Animals</strong></td>
<td>Animals engage children and have a higher rate of recognition among younger children. Girls find animals in advertisements cute and friendly and boys tend to enjoy animals because of the different voices they make or their actions.</td>
<td>Any time an animal comes onto the screen. Could be a toy, real life or footage.</td>
</tr>
<tr>
<td><strong>Animation</strong></td>
<td>Children have found animations to be enjoyable, entertaining and have felt that cartoons are directed towards them. Children find animations eye catching and in some cases friendly, cute or happy.</td>
<td>An animation is a drawing/cartoon either moving or still. When animation is used in the advertisement including logos, a character or in the background.</td>
</tr>
<tr>
<td><strong>Catchy slogans</strong></td>
<td>Catch phrases and easy to remember slogans are appealing to children and increase the ability to recall the advertisements.</td>
<td>Catch phrases are normally short, sharp and easy to remember, often spoken and/or written for increased impact.</td>
</tr>
<tr>
<td><strong>Celebrities</strong></td>
<td>Celebrities make children think the advertisement is more important, entertaining and effective. Children transfer the positive emotion associated with the celebrity to the product.</td>
<td>Someone with a celebrity status, sporting or television personality who would be recognisable to children.</td>
</tr>
<tr>
<td><strong>Characters</strong></td>
<td>Characters, especially cartoon characters, can be more recognisable, recall may be higher and can increase advertisement likeability.</td>
<td>The people within the advertisement who have been given a major role to play.</td>
</tr>
<tr>
<td><strong>Colours</strong></td>
<td>Bright colours stand out and catch children’s attention. Black and white can also be effective because it can be seen as mysterious and intriguing.</td>
<td>Bright colours that are eye catching or full screen colour, obvious, draws attention. The appearance of a black and white advertisement.</td>
</tr>
<tr>
<td><strong>Humour</strong></td>
<td>Humour attracts attention, increases likability and recall. Different ages enjoy different styles of humour, younger children prefer visual slapstick while older children also enjoy sophistication, sarcasm, irony and sexual innuendo humour.</td>
<td>Acts within advertisements that children might find funny. This may include physical slapstick humour, &quot;silly&quot; or unusual behaviour, sarcasm and sexualised jokes.</td>
</tr>
<tr>
<td><strong>Music</strong></td>
<td>Music helps to create the mood of an advertisement, engages children and increases interest. Music that is upbeat and catchy is able to make the advertisements more recognisable and memorable.</td>
<td>Emotive music including upbeat, catchy, light hearted or child friendly music or music which engages with the audience. This may also include popular songs from well-known artists.</td>
</tr>
<tr>
<td><strong>Sound effects</strong></td>
<td>Sounds such as cheering or &quot;fun&quot; noises appeal to children, as they believe it adds to the impact and credibility of the advertisement.</td>
<td>Any sound effects heard in the advertisement for example, cheering and clapping.</td>
</tr>
<tr>
<td><strong>Sports teams</strong></td>
<td>Linking sporting teams or popular events with products has been identified as a way of capturing a younger audience.</td>
<td>The appearance of a well-known team or event to promote their product can include any mention or image of a sporting event or team. Note: odds promotion of an event, or the promotion of a game/race without using a team or code logo was not included.</td>
</tr>
<tr>
<td><strong>Risk reducing promotions</strong></td>
<td>Children can recall advertisements that contain promotions and have indicated that it may influence them to gamble when they are older.</td>
<td>Any mention (spoken or visual) of the words &quot;cash out,&quot; &quot;money back,&quot; &quot;cash back&quot; or &quot;refund.&quot;</td>
</tr>
<tr>
<td><strong>Social acceptance</strong></td>
<td>Children are responsive to activities that will result in acceptance from a peer group, or a gain in popularity. Showing people with high self-confidence is also very appealing for adolescents.</td>
<td>A main character is surrounded by people, people appearing popular or being happy around other people.</td>
</tr>
<tr>
<td><strong>Sporting success</strong></td>
<td>Observing sporting achievements are often liked by children.</td>
<td>When one of the main actors is shown to have a sporting ability, this can be in everyday tasks or professional skill. This may also include footage of athletes performing.</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Children find gambling online appealing due to their understanding of the internet and increased accessibility to technology.</td>
<td>Main actor interacting with new technology such as smart phone, tablet/iPad, smart TV and laptop.</td>
</tr>
<tr>
<td><strong>Voiceovers</strong></td>
<td>Voiceovers are able to create a mood of excitement, increase adrenaline and increase the feeling of engagement and connectedness with the advertisement.</td>
<td>Any time there is a voiceover. Usually dialogue when you are unable to see the person speaking.</td>
</tr>
<tr>
<td><strong>Winning</strong></td>
<td>The theme of winning is appealing to children because they connect it with a potential positive outcome.</td>
<td>Any mention (written or visual) of the word &quot;win&quot; or &quot;winning&quot;, also an emphasis on what could be won (money, prizes).</td>
</tr>
<tr>
<td>Attention Strategies</td>
<td>Total ads per agency</td>
<td>Sportingbet per ad</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Music (87.9%)</td>
<td>80</td>
<td>9</td>
</tr>
<tr>
<td>Voiceovers (86.8%)</td>
<td>79</td>
<td>9</td>
</tr>
<tr>
<td>Catchy slogans (85.7%)</td>
<td>78</td>
<td>9</td>
</tr>
<tr>
<td>Sound effects (62.6%)</td>
<td>57</td>
<td>9</td>
</tr>
<tr>
<td>Technology (60.4%)</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td>Humour (53.8%)</td>
<td>49</td>
<td>9</td>
</tr>
<tr>
<td>Animation (46.2%)</td>
<td>42</td>
<td>9</td>
</tr>
<tr>
<td>Colours (45.1%)</td>
<td>41</td>
<td>9</td>
</tr>
<tr>
<td>Characters (44.0%)</td>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>Winning (41.8%)</td>
<td>38</td>
<td>4</td>
</tr>
<tr>
<td>Social acceptance (31.9%)</td>
<td>29</td>
<td>0</td>
</tr>
<tr>
<td>Celebrities (30.8%)</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>Sports team (25.3%)</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Animals (22.0%)</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Risk reducing promotions (19.8%)</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Sporting succes (12.1%)</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>9</td>
</tr>
</tbody>
</table>

(Continues)
Other companies used the same catchy slogan in all advertisements, such as Ubet.com.au’s use of the slogan “For the thrill of it.”

Sound effects were used in nearly two-thirds of the advertisements (n = 57, 62.6%), with most sound effects relating to success, winning, or inappropriate content. For example, in campaigns for TAB.com.au sounds of people cheering were used to signify when characters’ bets were successful. In some Sportingbet.com.au advertisements “bleeps” were used to disguise swearing by former Australian cricketer and reality television show contestant Shane Warne.

### 3.2 | Attention strategies using technology

Technology featured in just under two-thirds of advertisements (n = 55, 60.4%) and was used by all betting brands. Actors used technology such as mobile phones, tablets and smart devices to demonstrate how to place bets and gamble. One Betfair.com.au advertisement explained the different features of the company’s betting app on a tablet. Another advertisement by Sportsbet.com.au promoted that a new mobile betting app was now compatible with a tablet so that the character with “manly hands” could easily use the app, while other advertisements showed the main character placing a bet on his smartphone.

### 3.3 | Attention strategies using humour

Humour was an attention strategy identified in over half of advertisements (n = 49, 53.8%). Sportsbet.com.au used humour in all 17 of its advertisements, some of these advertisements contained slapstick humour. For example, one advertisement showed a large man in bright yellow swimwear holding “teeny tiny tech” (a mobile phone) and dropping the phone in the pool. Half of Ladbrokes.com.au advertisements also used humour, including characters speaking with exaggerated British “cockney” accents and using quick rhyming language “...they can get their bangers and mash in a flash...” and “...starting price, very nice. ...”

### 3.4 | Attention strategies using animation

Animation was used in 42 of the advertisements (46.2%), with five companies using this attention strategy in all or almost all of their advertisements (Sportingbet.com.au 9/9, TomWaterhouse.com 6/7, Crownbet.com.au 4/4, WilliamHill.com.au 4/5, and Bet365.com.au 2/2). For example, the Bet365.com.au advertisements incorporated a “Transformer” style animation that formed the Bet365.com.au logo, while an advertisement from Betfair.com.au explained that its odds were the best when compared to other companies, by showing an animated “mock” horse race with bookmakers represented as galloping jockey jerseys. In some of Ladbrokes.com.au advertisements, animation was used to “fly” and “swish” words such as “Ladbrokes shout” and “best tote or SP” across the screen in a way that may have caught the attention of viewers.

### 3.5 | Attention strategies using colour

The use of specific colours was evident in just under half of the advertisements (n = 41, 45.1%). Sportingbet.com.au used a bright blue background at the end of every advertisement which made the advertisements easily recognisable, while TAB.com.au advertisements used prominent green and gold colours in three advertisements to emphasise the patriotic association between the company and the Australian Soccer World Cup team. All TomWaterhouse.com advertisements encouraged the idea that they were a sophisticated company through the use of black and white advertisements.

### 3.6 | Attention strategies using characters

Characters were present in over 40% (n = 40, 44.0%) of advertisements with Sportsbet.com.au (12/17, 70.6%) and Ladbrokes.com.au (12/14, 85.7%) the companies that used characters in many of their advertisements. In one Ladbrokes.com.au advertisement characters were shown as everyday men named “Fast Eddie, Fast Tommy and Fast Mickey,” who were pictured with their Ladbrokes cards. The advertisement introduces a character “Nigel” who was portrayed as the unpopular and undesirable member of the group because he did not have a Ladbrokes card.

### 3.7 | Attention strategies using concepts about winning

Attention strategies associated with winning featured in just over 40% of advertisements (n = 38, 41.8%). These included (i) the word “win,” “winning,” or “winnings” or (ii) images of someone winning or showing what could be won. Concepts about winning was an attention strategy that featured most commonly in Ladbrokes.com.au advertisements (9/14, 64.3%). For example, in one advertisement a group of men used their Ladbrokes cash card to pay for extravagant items such as dinners, limousines and hotel rooms. In one TAB.com.au advertisement, two male friends were shown celebrating a
gambling win and then dancing up to a female TAB employer to collect their winnings.

3.8 | Attention strategies highlighting the social benefits of gambling

An attention strategy that emphasised the social benefits achieved from betting was social acceptance, which appeared in close to a third (n = 29, 31.9%) of advertisements. Social acceptance appeared in over 60% of TAB.com.au advertisements (7/11, 63.6%), and particularly centred on the theme of “mateship.” Many TAB.com.au advertisements included a group of young males sitting together, collecting winnings and celebrating together. One Sportsbet.com.au advertisement showed a man hugging a bag of money while the voiceover stated, “I wish I was that guy,” while two other Sportsbet.com.au advertisements depicted young men withdrawing money from an ATM after a win and then “shouting” their friend’s drinks or food, with applause from their friends.

3.9 | Attention strategies using celebrities and sports teams

Celebrities (n = 28, 30.8%) and well-known sporting teams (n = 23, 25.3%) also featured in advertisements. Tom Waterhouse (well-known identity and the son of one of Australian’s most successful horse trainers) featured as the main actor in all TomWaterhouse.com.au advertisements. Sportingbet.com.au was another company that featured celebrities in over 65% of advertisements (6/9, 66.7%), notably former Australian cricket player Shane Warne who appeared in four Sportingbet.com.au advertisements. WilliamHill.com.au (4/5, 80.0%) advertisements contained images relating to some of the most popular sports in Australia; the Australian Football League and National Rugby League (NRL). These included images of athletes, team names and logos, and team colours. NRL teams the Penrith Panthers and Brisbane Broncos featured in some Centrebet.com.au and Sportingbet.com.au advertisements.

3.10 | Attention strategies using animals

Animals appeared in about one in five advertisements (n = 20, 22.0%). For example, TAB.com.au and Ladbrokes.com.au both contained advertisements that featured a dog with the main actors of the advertisement. A series of TAB.com.au advertisements contained plush toy animals, with Mark Schwarzer (a former Australian soccer player) carrying a stuffed kangaroo plush toy in one advertisement, with kangaroo and koala plush toys sitting in the background of another advertisement.

3.11 | Attention strategies creating perceptions of reduced risk

Risk reducing attention strategies included inducements and incentives, such as “cash out,” “cash back,” “money back,” and “refund” offers (n = 18, 19.8%). These promotions featured in half of Centrebet.com.au advertisements (5/10, 50.0%), and almost 30% of Sportsbet.com.au (5/17, 29.4%) and Ladbrokes.com.au (4/14, 28.6%) advertisements. In an advertisement for Sportsbet.com.au a man on his Sportsbet app deliberates whether or not to press a “cash out” button when he observes his winnings decreasing during a match, with his friends celebrating when he makes a decision to “cash out.” In another advertisement by Ladbrokes.com.au the main actor stated “if your team scores the first try but loses get your cash back” and in another advertisement TomWaterhouse.com promised viewers their “money back.”

3.12 | Attention strategies highlighting sporting success

The final attention strategy related to sporting success (n = 11, 12.1%). One Ladbrokes.com.au advertisement showed a man perform a difficult pool shot with ease, and a Betfair.com advertisement showed a James Bond style character skilfully playing table tennis while betting on his phone. Other advertisements showed athletic ability such as a female kick boxer sparring with Shane Warne in a Sportingbet.com.au advertisement, and professional athletes demonstrating football skills such as passing, catching and tackling in a TomWaterhouse.com advertisement.

4 | DISCUSSION

This study aimed to explore the range of attention strategies used in Australian betting advertisements that have been demonstrated in public health studies as being particularly appealing to children. The results raise three key points for discussion.

First, there are now numerous case studies in which promotions used by industries studied by public health researchers and practitioners (including in relation to tobacco and alcohol) have strongly influenced the brand attitudes and consumption intentions of children towards those products.12,13 Researchers have clearly documented the attention strategies used in these promotions11-16 and the impact that they have on children.11,13,14 This study provides evidence that some advertisements for betting contain similar attention strategies that may have particular appeal for children. It is then a concern that exposure to advertisements which contain strategies that appeal to children could play a role in positively shaping their sports betting attitudes and consumption intentions.12,13,14 Given the alignment of gambling promotions with major sporting codes, we would also suggest that children who are fans of sport and actively watch televised sport may be additionally impacted due to their high levels of exposure to this advertising.5,29 This study has demonstrated the need for future research with children which explores how children respond to betting advertising and if any of the advertising strategies have particular appeal for children, and how this appeal may be shaping children’s attitudes. Given the potential for betting advertisements to appeal to children, it is also important for governments to remove regulatory loopholes which allow the promotion of gambling products during children’s viewing hours.8
Second, we identified attention strategies that were specific to betting advertisements—including the use of technology, concepts related to winning, and promotions which may create a perception that the risks associated with gambling are reduced. Sports betting companies have continually adapted their products to keep up with technological advancements, such as the ability to bet on mobile devices and the 24 hour availability of the Internet.\(^3\)\(^3\)\(^0\) Several studies suggest that the technology associated with sports betting (particularly via mobile technology and apps) may increase the appeal of sports betting for children.\(^3\)\(^3\)\(^1\) Our study demonstrates that this technology is a key attention strategy used by the betting industry. Although there is limited research that has tested how this may directly influence children’s behaviours, we hypothesise that the link between smart devices and sports betting may engage children and effectively demonstrate how to gamble via a process of observational learning through advertisements. The use of technology, as well as messages that gambling enhances social success and winning, and that risks may be reduced via “cash back” or “refund” offers, may be potentially harmful for children who do not have the same ability as adults to criticise or question the messages they see in marketing promotions. However, it should be noted that these types of “risk reducing” promotions also appear to have an impact on young adults, with research indicating that young men are incentivised to open multiple betting accounts, or bet on events that they otherwise would not bet on, because of these promotions.\(^2\)\(^5\)\(^3\)\(^2\) Similarly, research with children suggests that these types of promotions influence children’s intentions to gamble as adults.\(^6\) These are types of promotional tactics that have not been observed in other areas of health, and should be a particular focus of regulatory efforts aimed to protect children from promotions that may intentionally or unintentionally “educate” and influence children about gambling products and technologies.

Third, the findings demonstrate the need to further evaluate the effectiveness of current advertising regulations relating to the content of betting advertisements. Regulations associated with advertising content are not new in public health, and there are many historical templates to consider in this light. The wagering industry has at times been critical and defensive of increased regulations surrounding the advertising for its products. For example, in response to research which showed that promotions were leading to an increased awareness of sports betting brands in children, a spokesperson for the Australian Betting Council stated that they needed “…to ensure that the real benefits of advertising are preserved and that any scaling back of betting advertising doesn’t result in unintended consequences, such as more Australians betting with unlicensed operators.”\(^3\)\(^3\)\(^3\)\(^3\) Recently, new codes of conduct have been proposed by the government, which would see gambling advertising banned during live sporting events (until 8.30 PM).\(^3\)\(^4\) However, gambling advertising could still occur during times when children are watching programs such as news, current affairs, and sports entertainment programs. There is no research that we are aware of that has documented the amount of gambling advertisements that children are exposed to while watching television. Future research should look to explore this exposure in children as this would be important information when governments are considering changes to current regulations. It is also important that governments further evaluate the regulations restricting the content of betting advertisements to ensure that children’s engagement with these messages is limited, in the context that there is no clear evidence that self-regulatory codes have reduced such engagement. Regulations should be created and enforced without the involvement of the gambling industry to ensure gambling companies are held accountable for their actions and that children are not exposed to potentially harmful advertisements.

4.1 | Limitations

Some limitations of this study should be considered when interpreting results. The online selection strategy of sourcing advertisements from YouTube channels and websites assumed that the time that the advertisement was posted aligned with the time it appeared on television, however, it is possible that the timestamps on the video did not accurately reflect when the advertisement was broadcasted. Because of this it was not possible to analyse if and how attention strategies within advertisements may have changed during this time period. To further develop on our study, further research could purchase commercial data to ensure a larger amount of advertisements could be analysed. These results could then be explored with children to identify the attention strategies that they find most influential on their attitudes and gambling behaviours. Finally, we did not identify the number of times an attention strategy appeared in an advertisement. Future research could explore if particular strategies are repeated throughout different types of advertisements and the influence this repetition may have on influencing children’s attitudes and consumption intentions.

5 | CONCLUSION

This study identified a range of attention strategies within Australian betting advertisements that have been shown in other areas of public health to have particular appeal for children. Future research investigating the content and impact of gambling advertising should be clearly designed to inform government policy and regulation. In particular, research examining the nature and extent to which betting advertising appeals to children and influences consumption attitudes and intentions will be important in prompting governments to strengthen regulatory processes to ensure the potential harm from gambling is reduced.

ACKNOWLEDGEMENTS

The authors would like to acknowledge Ms. Emily Deans who contributed to the data collection process of this study.

REFERENCES


How to cite this article: Pitt H, Thomas SL, Bestman A, Randle M, Daube M. Do betting advertisements contain attention strategies that may appeal to children? An interpretative content analysis. Health Promot J Austral. 2017;00:1–9. https://doi.org/10.1002/hpja.12
Chapter 7. “It's just everywhere!” Children and parents discuss the marketing of sports wagering in Australia

7.1 Chapter overview

This chapter contains the third publication in this thesis titled “It’s just everywhere!” Children and parents discuss the marketing of sports wagering in Australia’. This publication was submitted to the Australian and New Zealand Journal of Public Health, an open access journal, with a Q2 ranking. It was first published on the 14th of August 2016.

7.2 Author declaration

1. Details of publication and executive author

<table>
<thead>
<tr>
<th>Title of Publication</th>
<th>Publication details</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It’s just everywhere!” Children and parents discuss the marketing of sports betting in Australia.</td>
<td>Australian and New Zealand Journal of Public Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of executive author</th>
<th>School/Institute/Division if based at Deakin; Organisation and address if non-Deakin</th>
<th>Email or phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah Pitt</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td><a href="mailto:hpitt@deakin.edu.au">hpitt@deakin.edu.au</a></td>
</tr>
</tbody>
</table>

2. Inclusion of publication in a thesis

<table>
<thead>
<tr>
<th>Is it intended to include this publication in a higher degree by research (HDR) thesis?</th>
<th>Yes</th>
<th>If Yes, please complete Section 3 If No, go straight to Section 4.</th>
</tr>
</thead>
</table>

3. HDR thesis author’s declaration

<table>
<thead>
<tr>
<th>Name of HDR thesis author if different from above, (If the same, write “as above”)</th>
<th>School/Institute/Division if based at Deakin</th>
<th>Thesis title</th>
</tr>
</thead>
<tbody>
<tr>
<td>As above</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td>Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions</td>
</tr>
</tbody>
</table>

If there are multiple authors, give a full description of HDR thesis author’s contribution to the publication (for example, how much did you contribute to the conception of the project, the design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)

Hannah Pitt significantly contributed to all aspects of the study. She contributed to the study design, data collection, led the analysis of the data, and prepared the first draft of the paper. She also led the drafting and revision process of the manuscript.

I declare that the above is an accurate description of my contribution to this paper, and the contributions of other authors are as described below. Signature and date 20.11.17

4. Description of all author contributions

<table>
<thead>
<tr>
<th>Name and affiliation of author</th>
<th>Contribution(s) (for example, conception of the project, design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, data collection, analysis, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Amy Bestman, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Amy Bestman contributed to data collection, analysis, and critical revisions of the paper.</td>
</tr>
</tbody>
</table>
5. Author declarations
I agree to be named as one of the authors of this work, and confirm:

xi. that I have met the authorship criteria set out in the Deakin University Research Conduct Policy,

xii. that there are no other authors according to these criteria,

xiii. that the description in Section 4 of my contribution(s) to this publication is accurate,

xiv. that the data on which these findings are based are stored as set out in Section 7 below.

If this work is to form part of an HDR thesis as described in Sections 2 and 3, I further

xv. consent to the incorporation of the publication into the candidate’s HDR thesis

submitted to Deakin University and, if the higher degree is awarded, the subsequent publication of the thesis by the university (subject to relevant Copyright provisions).

<table>
<thead>
<tr>
<th>Name of author</th>
<th>Signature*</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Amy Bestman</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Melissa Stoneham</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Mike Daube</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
</tbody>
</table>

6. Other contributor declarations
I agree to be named as a non-author contributor to this work.

<table>
<thead>
<tr>
<th>Name and affiliation of contributor</th>
<th>Contribution</th>
<th>Signature* and date</th>
</tr>
</thead>
</table>

* If an author or contributor is unavailable or otherwise unable to sign the statement of authorship, the Head of Academic Unit may sign on their behalf, noting the reason for their unavailability, provided there is no evidence to suggest that the person would object to being named as author

7. Data storage
The original data for this project are stored in the following locations. (The locations must be within an appropriate institutional setting. If the executive author is a Deakin staff member and data are stored outside Deakin University, permission for this must be given by the Head of Academic Unit within which the executive author is based.)

<table>
<thead>
<tr>
<th>Data format</th>
<th>Storage Location</th>
<th>Date lodged</th>
<th>Name of custodian if other than the executive author</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPSS file and paper copy of surveys</td>
<td>Deakin University</td>
<td>Various</td>
<td>Samantha Thomas</td>
</tr>
</tbody>
</table>

This form must be retained by the executive author, within the school or institute in which they are based.

If the publication is to be included as part of an HDR thesis, a copy of this form must be included in the thesis with the publication.
“It’s just everywhere!” Children and parents discuss the marketing of sports wagering in Australia

Hannah Pitt, Samantha L. Thomas, Amy Bestman, Melissa Stoneham, Mike Daube

Gambling harm is a significant public health issue, with clear consequences for the health and wellbeing of communities. While research in the area has predominantly focused on addictive and individualised behaviours, public health researchers are increasingly investigating how the tactics of gambling industries may be contributing to harm. Most Australian and New Zealand research has specifically investigated the extent and nature of the infiltration of gambling marketing in sport. This issue has attracted increasing attention in Australia due to the proliferation of sports wagering marketing aligned with professional sporting teams and matches, including through the Australian Football League (AFL) and National Rugby League (NRL).

Data released in 2015 indicated that the gambling industry was the fourth highest industry for advertising spend in Australia, with a significant increase between 2012 ($45 million) and 2015 ($147 million). Teams from Australia’s two major sporting codes, the AFL and NRL, have been heavily involved in the ownership and promotion of gambling products and services. While this has traditionally involved the ownership of Electronic Gambling Machine (EGM or pokie) venues, researchers have also documented an increasing relationship between sporting codes and teams and the promotion of sports wagering. These relationships include formal sponsorship partnerships and uniform naming rights. Further, television broadcast and stadium based wagering marketing includes sponsorship announcements, signage, promotion of odds, commercial break advertising, pop ups, and field logos. Researchers have documented how sports wagering companies have used non-traditional media platforms such as Facebook and Twitter to align themselves with match play in the AFL and NRL, as well as the use of current and ex-athletes to endorse products.

There have been a number of concerns raised by politicians, academics, government organisations, and community stakeholders about the way in which the marketing relationship between gambling and sport may be positively ‘shaping’ or ‘normalising’ children’s gambling attitudes and consumption intentions. History has demonstrated that sport is a powerful mechanism for influencing children’s brand awareness and subsequent product preferences. For example, researchers showed that tobacco sponsorship of sport created positive associations between smoking and sport among young children. While the wagering industry has repeatedly claimed that it does not specifically seek to target children in their advertising campaigns, there are strategies used within promotions (such as the use of cartoons, celebrity endorsements and humour) that may appeal to children.

Robertson and Rossiter [1974] suggested that until children actually experienced discrepancies between products as advertised and as consumed, they were unable to entirely comprehend advertising’s persuasive intent. For example, if children have not experienced losses from sports wagering, they are unlikely to understand the

Abstract

Objective: To investigate how children and adults recall the content and promotional channels for sports wagering marketing.

Methods: A mixed methods study of 152 parent/child (8-16 years) dyads was conducted at AFL (Australian Football League), NRL (National Rugby League), and soccer sporting sites in New South Wales and Victoria, Australia. Questions related to the frequency of viewing AFL and NRL matches, sports wagering promotions and perceptions of the normalisation of wagering in sport. Descriptive statistics and thematic analysis were used to analyse data.

Results: Children recruited from NRL (n=75, 96.2%) and AFL (n=46, 92.0%) sites were significantly more likely to have recalled having ever seen a promotion for sports wagering as compared to children from Soccer sites (n=18, 75.0%) (p<0.05). Children and adults identified seeing sports wagering promotions in similar environments, most commonly on television, and at stadiums. Three-quarters of children (75.0%) and the majority of adults (90.0%) perceived that sports wagering was becoming a normal part of sport.

Conclusion and Implications: This research shows that children engaged in particular sports have high awareness of wagering marketing, particularly as seen on television or at sporting matches. Regulation should comprehensively address the placement, quantity and content of wagering marketing aligned with sport to prevent current and/or future gambling harm.

Key words: children, sports wagering, gambling, marketing, normalisation
intent behind the highly positive social and financial messages about sports wagering. These include messages about winning, peer acceptance, social value and sports fan loyalty, as well as promotions that appear to lessen the perceived risk associated with sports wagering, including ‘refund’/ ‘cash out’ and ‘cash back’ offers.13 Finally, sports-based wagering is different from many other types of gambling products, because in essence sport is the product with wagering as the ‘service’ linked to that product. We argue that promotions for wagering that are interwoven with sports that are culturally valued by children may be additionally influential in shaping their awareness of, attitudes towards, and ultimately preference to consume wagering products.

What is less clear from the current literature is how children understand and interpret the key messages presented within gambling promotions, particularly as they align with sports teams and matches. For example, there is limited research that explores whether those children who engage with sport (via participation in or viewing of sport) may have specific awareness of sports wagering brands and marketing strategies, and whether this awareness is similar to or different from that of adults. Further, do children recall seeing wagering advertisements in particular environments, and do they perceive that sports wagering is becoming a normal part of the sports fan experience? This study investigated how children and their parents or primary caregivers who actively participate in or watch Australia’s two major sporting codes – the AFL and the NRL – recall promotions for sports wagering marketing. We also aimed to propose a model to explain how children’s exposure to sports wagering marketing may positively influence their future wagering consumption attitudes and behaviours. To do this, the research was guided by four key research questions:

1. What is the extent to which children and parents recall seeing sports wagering promotions?
2. Where do they recall seeing these promotions?
3. What do they specifically recall about sports wagering promotions during sporting matches?
4. Do children perceive that wagering is being normalised as part of sport, and which factors do they describe as contributing to this?

Methods

Approach

Data for this mixed methods study were collected within a broader study that explored a range of issues relating to wagering marketing within sport. Other data from this study specifically relating to sports wagering sponsorship of sport are detailed elsewhere.20 The data presented in this paper specifically explores recollections of all forms of sports wagering marketing in a range of marketing environments and specifically within sporting matches. Ethical approval for this study was received from the University Human Research Ethics Committee.

Sample and Recruitment

The sample for this study was family dyads of at least one child (8-16 years) and one parent or caregiver (adults). Children and adults who could not speak English were excluded. The age group was selected to extend previous research about sports wagering marketing conducted with slightly older children (14-18 year-olds).21 We were interested in exploring the responses of younger children, given that research suggests that children may be able to understand the selling intent of advertising, but may not be able to understand its persuasive intent until much later in childhood.22 Given that the wagering industry has argued that a) parents should have primary responsibility for monitoring and educating children about advertising, and b) they do not deliberately target children,21 this study explored the similarities and differences between adult and child recall. The sample was recruited predominantly from AFL and NRL community sporting sites because research indicates that these two sports are the two most highly watched sports by children in Australia and that they contain significant amounts of marketing for sports wagering outside of traditional commercial break advertising.24

Setting

The study sample was recruited at AFL and NRL sporting sites. In addition, a sample of children was recruited from junior weekend soccer games. This group was included to explore whether children who did not actively participate in AFL or NRL would be less able to recall specific aspects of sports wagering marketing. Data were collected from nine sites in New South Wales (including Sydney and the Illawarra regional area) and Victoria (Melbourne) to ensure that the sample came from a diverse range of socio-demographic backgrounds and geographical settings.

Data Collection

Data were collected between April and August 2015 using a mix of quantitative and qualitative methods. Children and adults were separated and completed the study out of hearing distance from each other. Participants were asked a range of questions relating to their socio-demographic characteristics. All participants were asked age and gender, and adults were also asked to state ethnicity and postcode. Participants were then asked about the amount of AFL and NRL they watched either on television or at live games. A similar study21 identified that children found it difficult to recall accurately how many times they watched sport on television each week. For this study, a five point Likert scale (Never, Not often, Sometimes, Very often, All the time) was used to assess viewing frequency.

In the first specific question relating to sports wagering, participants were asked whether they could remember ever seeing or hearing a promotion for sports wagering. This question was asked using a free recall (unprompted) method and was recorded as a yes/no answer. Participants who could not recall any sports wagering marketing were asked a question about the normalisation of gambling in sport and then went on to complete other sections of the study. Parents and children who could recall seeing or hearing sports wagering marketing were provided with a laminated picture board of different marketing environments. Picture boards were used as a way of collecting the data for this question as they were more child-friendly but still effective in also capturing environments where parents had seen sports wagering marketing. Six variations of the picture board were prepared with the images in a randomised order (to ensure there was no ordering effect associated with selections). Pictures of a television, newspaper, social media logos, a sports team, a betting venue, a stadium, billboard, radio, mobile phone/IPad, public transport (bus, train), as well as separate images of a bus stop and train station were included. The bus stop and train station images were included because, after piloting, it became clear that participants had seen sports wagering marketing either on the sides of buses or trains/trams, or on static billboards at bus stops or train stations and were...
becoming slightly confused by the images of specific public transport vehicles and the billboard image. The researchers stated: ‘Here are some different places that you may have seen sports betting marketing. Can you remember seeing sports betting marketing in any of these places?’ The researchers then asked participants to circle any environments where they had seen sports wagering marketing with a marker pen, and a photograph was taken of the completed picture board. The term ‘wagering’ was used in the questions instead of ‘betting’ because piloting showed that many children did not understand what the term ‘wagering’ meant, but clearly knew the term ‘betting’.

Participants also completed two verbal open-ended qualitative questions. The first asked them to describe any marketing for sports wagering that they had seen specifically during a sporting match. The second explored participants’ perceptions of the normalisation of wagering by asking if they thought betting was “becoming more normal or common in sport”. Children were initially asked if they thought that gambling was becoming a ‘normal’ part of sport, but some children found this question difficult to answer and were unsure what we meant by the word ‘normal’. If children appeared confused at this question they were prompted with the word ‘common’. The addition of this prompt increased children’s understanding of the nature of this question, and the responses from children were similar to those of other children. If they responded yes, they were asked to provide information on why they thought that and if not, why not? Answers were recorded by researchers and were repeated to participants to ensure clarity of recording.

**Data analysis**

Descriptive statistics were used for quantitative responses with Chi-square ($\chi^2$) tests used to determine whether different groups of children (based on recruitment site), and children and adults, differed significantly in their responses. Postcode data were mapped to the Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Advantage and Disadvantage (IRSD) (a suburb-level measure of socio-economic advantage and disadvantage from 1, the most disadvantaged, to 10, the most advantaged). A constant comparative approach to thematic analyses was used to explore the key themes present in qualitative responses, with a particular focus on comparing data between children and adults, and across sample recruitment sites.

**Results**

**Quantitative results**

**Sample characteristics**

A total of 304 participants from 152 families participated in the study from NRL (n=78 families, 51.3%), AFL (n=50 families, 32.9%), and Soccer (n=24 families, 15.8%) recruitment sites. Most families were residents in New South Wales (n=244, 80.3%). The age of children ranged from 8 to 16 years with an average age of 10.8 years (SD 2.3). About two-thirds of children were aged 8-11 years (n=101, 66.4%) and about three-quarters were male (n=118, 77.6%). Adults were aged 29-71 years with a mean age of 43.2 years (SD 7.3). One adult in the sample was a grandparent, but was the main carer for the child on the day of the data collection. Just over half the adult sample were mothers (n=82, 53.9%). Families were distributed across SEIFA deciles, with 10.5% (n=16) in the lowest three deciles; 54.6% (n=83) in the mid four deciles; and 34.2% (n=52) in the top three deciles.

**Sport viewing frequency**

Table 1 reports the viewing frequency of AFL or NRL matches. Those recruited from AFL sites were significantly less likely to watch NRL at least ‘Sometimes’ (Child n=20, 40.8%; Adult n=16, 33.3%), as compared to those recruited from NRL (Child n=76, 97.4%; Adult n=76, 97.4%, p<0.05) and Soccer (Child n=18, 75.0%; Adults n=19, 79.2%, p<0.05) sites. Those recruited from AFL sites were significantly more likely to have recalled having ever seen a promotion for sports wagering. The results show that the vast majority of children (n=139, 91.4%) and adults (n=149, 98.0%) could recall having ever seen a promotion for sports wagering. There were some variations according to sporting code in the child sample, with children recruited from NRL (n=75, 96.2%) and AFL (n=46, 92.0%) sites significantly more likely to have recalled having ever seen a promotion for sports wagering as compared to children recruited from Soccer sites (n=18, 75.0%) (p<0.05).

Participants recalled seeing sports wagering marketing in a number of different environments (Table 3). The top four most frequently recalled environments for children were: television (n=135, 97.1%), stadiums (n=105, 75.3%), radio (n=69, 49.6%), and websites (n=64, 46.0%). For adults, the top four most frequently recalled marketing channels were: television (n=144, 96.6%), stadiums (n=92, 61.7%), websites (n=68, 45.6%), and newspapers (n=66, 44.3%).

**Qualitative results**

Participants described specific types of marketing they had seen played during sporting matches and their perceptions of the normalisation of wagering in sport.

**Recall of brand names**

Some children and adults stated that they recalled seeing specific brand names during sporting matches and sporting programs. Ten brands were mentioned by children (listed from most frequently to least frequently mentioned): Sportsbet, Bet365, 2016 Online Australian and New Zealand Journal of Public Health © 2016 Public Health Association of Australia
Table 2: Recall of sports wagering promotions.

<table>
<thead>
<tr>
<th>Site</th>
<th>Child: Yes (%)</th>
<th>Child: No (%)</th>
<th>Total n=304</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRL</td>
<td>75 (96.2)</td>
<td>3 (3.8)</td>
<td>78 (100.0)</td>
</tr>
<tr>
<td>AFL</td>
<td>46 (92.0)</td>
<td>4 (8.0)</td>
<td>50 (100.0)</td>
</tr>
<tr>
<td>Soccer</td>
<td>18 (75.0)</td>
<td>6 (25.0)</td>
<td>24 (100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>139 (91.4%)</td>
<td>13 (8.6%)</td>
<td>152 (100.0)</td>
</tr>
</tbody>
</table>


Sportsbet was the most commonly mentioned brand by children (n=84), with 11 children specifically describing the volume of promotions for Sportsbet that they had seen, particularly when watching the NRL, or NRL related sporting shows:

“Sportsbet when watching NRL. A lot. About 10 times a day.” – 8-year-old boy, Soccer.

Placement and volume of marketing

Children described seeing promotions for sports wagering when they were watching sport on television. Some descriptions related to the temporal placements of promotions “during the game”. For example, some children stated that they had seen sports wagering advertisements during formal scheduled breaks in play, including “half time” breaks. Others stated that they had seen promotions prior to the start of the match:

“I’ve seen the TAB ads before kickoff.” – 10-year-old boy, NRL.

Other children described promotions during spontaneous breaks in match play, for example some said they had seen promotions after a player had scored a try or kicked a goal:

“I’ve seen them when someone kicks a goal and between quarters” – 12-year-old boy, AFL.

Children from soccer recruitment sites rarely described seeing sport wagering promotions during soccer matches, but did comment that they had seen sports wagering promotions during NRL matches. These children often commented on the volume of marketing during matches. For example, one 8-year-old boy stated that he had seen sports wagering promotions: “on the telly, on the jerseys, it’s just everywhere!”

In contrast to children, adults only described formal placements for sports wagering marketing. For example they recalled pre-game promotions such as the odds and live crosses to bookmakers; advertising break promotions; on-field promotions including “signage” and “logos on the field”; and post-game promotions such as sports wagering marketing “during man of the match”. No adults described wagering promotions during spontaneous breaks in play.

However, children and adults recalled similar types of promotions that they had seen when going to a match at a stadium. These included “signs around the ground”, on “jerseys” and “on the big screen”. One 8-year-old boy recruited from an NRL site specifically described the link between NRL athletes and gambling, stating: “they put player’s names on the board and money next to it”. Some children and adults also described seeing sports wagering promotions during sports related shows such as the AFL and NRL ‘Footy Shows’. For example, one 11-year-old girl said:

“I’ve seen Sportsbet lots and lots and lots. I’ve seen them on the Footy Show, and I’ve seen Sportsbet a lot.” – 11-year-old girl, Soccer.

One adult described that she had remembered where she had seen a particular brand because it was the brand that she used for betting with her Punters Club (an organised gambling syndicate that may be either formally organised through a gambling company website or informally):

“Sportsbet on the Footy Show - that’s the one I use for my Punters Club now. We all have the app it’s easy. We switched from TAB because it became easier to put the money in and out.” – 38-year-old female, NRL.

Descriptions of marketing content

This theme showed the most differences between children and adults. Nineteen children, particularly from the NRL and AFL sites, discussed specific aspects of promotions compared to only two adults. A few children described the specific tactics used in promotions. Most descriptions of specific tactics related to advertisements that featured a ‘cash out’, ‘cash back’, or ‘money back’ promotion. Some children perceived that if you were losing, then the wagering provider would give you your money back. For example, one 11-year-old girl stated “if you lose by 8 points you get your money back”, and another 10 year old boy said “if you lose you get your money back”.

Other children specifically recalled ‘cash out’ promotions. For example, one 12-year-old boy stated that he had seen “a lot of cash out ones”, and a 13-year-old boy recalled that for Ladbrokes you could use a credit card and “get your money straight away”. Recalling ‘cash out’ storylines from advertisements was not uncommon, even among the younger children in the sample:

“The man was drinking a beer, then they pressed their phone and fly out and get cash out” – 8-year-old boy, AFL.

A number of children also remembered and described very specific promotions relating to the wagering provider Sportsbet. For example, one 13-year-old boy stated that marketing for Sportsbet was on “at the start of every rugby league game”; while an 8-year-old boy stated “Sportsbet before the game tells you to bet money”. One 12-year-old boy recalled a specific slogan “Sportsbet cash fasterer [sic]”, while a 10-year-old boy stated “Sportsbet, go on your computer and bet now”. One 11-year-old girl said that she could remember “all the Sportsbet ads”. She went on to describe a creative from a Sportsbet advertisement whereby a man had only:

“5% battery left on his phone, so he did sports betting, then his wife calls and the phone dies.” – 11-year-old girl, NRL.

The normalisation of wagering in sport

The majority of children (n=114, 75.0%) and adults (n=137, 90.1%) believed that wagering had become a normal (or common) part of sport. Children and particularly boys from AFL and NRL perceived that betting on sport was an activity that many people engaged in. Phrases such as “heaps of people do it”, “everyone does it”, “see a lot of people do it”, and that “lots of people who watch sport like to bet” were common in children’s narratives.

Children also perceived that gambling was a normal part of sport because of the amount of marketing for wagering that they had seen during the game. Children stated that they “see ads everywhere” and that advertising for gambling was “all over sport”. Other children and some adults also perceived that the volume of advertising made people feel that they should gamble and that if they did not...
Table 3: Number of different environments by adults and children.

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Adults</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFL Site</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-11 years</td>
<td>n=29</td>
<td>n=17</td>
<td>n=46</td>
</tr>
<tr>
<td>12-16 years</td>
<td>n=17</td>
<td>n=12</td>
<td>n=29</td>
</tr>
<tr>
<td>n=50</td>
<td>n=48</td>
<td>n=44</td>
<td>n=92</td>
</tr>
<tr>
<td>n=96</td>
<td>n=44</td>
<td>n=44</td>
<td>n=88</td>
</tr>
<tr>
<td><strong>NRL Site</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-11 years</td>
<td>n=91</td>
<td>n=81</td>
<td>n=172</td>
</tr>
<tr>
<td>12-16 years</td>
<td>n=81</td>
<td>n=103</td>
<td>n=184</td>
</tr>
<tr>
<td>n=76</td>
<td>n=151</td>
<td>n=103</td>
<td>n=254</td>
</tr>
<tr>
<td>n=151</td>
<td>n=103</td>
<td>n=103</td>
<td>n=206</td>
</tr>
<tr>
<td><strong>Soccer Site</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-11 years</td>
<td>n=15</td>
<td>n=19</td>
<td>n=34</td>
</tr>
<tr>
<td>12-16 years</td>
<td>n=19</td>
<td>n=18</td>
<td>n=37</td>
</tr>
<tr>
<td>n=23</td>
<td>n=41</td>
<td>n=59</td>
<td>n=82</td>
</tr>
<tr>
<td>n=23</td>
<td>n=59</td>
<td>n=59</td>
<td>n=118</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>163</td>
<td>117</td>
<td>280</td>
</tr>
</tbody>
</table>

Children and sports wagering promotions

This study aimed to build a more comprehensive picture of the impact of sports wagering marketing specifically on those children who are interested or involved in sport. It also aimed to build methodological insights about conducting sports wagering research with children in community settings.

Before discussing the results, it is important to recognize the study limitations and methodological learnings. First, the comparative soccer sample was much smaller than those for the AFL and NRL, and soccer groups. Further research should seek to explore the differences between children who are engaged in sports with high and low levels of wagering marketing. Further, while researchers have documented the amount of gambling promotions in AFL and NRL matches, limited research has examined the extent and nature of gambling marketing in other, less watched sports. These studies will be important in comparing the relationship between wagering marketing promotions in specific sports and the impact of this marketing on young people who watch these sports. Second, children do not clearly understand terms such as ‘wagering’. It is important that researchers use terminology that children understand, and are also clear about the meaning associated with specific terms. For example, in this study when we described ‘sports matches’, children and adults provided responses that related to a range of sports-related shows. Finally, this study did not aim to explore wagering consumption intentions. While some children spoke about their gambling intentions, it was not measured in any systematic way. This is an important area for future investigation.

This study raises four main points for discussion. The first relates to children’s exposure to sports wagering marketing and the impact that this has on their brand awareness and recall. The findings from this research show that more than 90% of children from AFL and NRL sites recalled seeing a sports wagering promotion, and that both children and adults identified seeing sports wagering promotions commonly on television, at sporting stadiums, and on internet websites. The wagering industry may claim that they do not specifically target children per se (thus somehow implying that if children do recall wagering marketing it is not their responsibility). However, this study indicates that many children commonly watch television outside G rated time periods, and watch sport and sporting programs which are exempt from regulations. Thus, they are clearly exposed to a range of industry marketing tactics. In this study most children who were recruited from AFL and NRL sites regularly watched these codes on television, and were significantly more likely than children from Soccer sites to recall having seen gambling promotions. Children in this...
study (and particularly those from AFL and NRL sites) were able to recall gambling brand names, and reported that they regularly saw gambling marketing embedded within sporting programs. It may thus be naïve or disingenuous to think that only deliberate targeting will influence children’s awareness of and preferences for sports wagering brands, and that responsibility can be transferred from wagering providers, sporting administrators and broadcasters, to others in the community such as parents.

This study shows that whether intentionally or not, marketing strategies used by the sports wagering industry are increasing brand awareness and recall in some children, particularly those who are engaged in watching AFL or NRL. It also shows that children recall some brands more than others – for example Sportsbet. Recent media articles report that Sportsbet spent $76.7 million on marketing in Australia during 2015. Brand awareness is often the first step in shaping children’s brand preferences and consumption behaviours, and further research should examine whether children’s brand awareness is higher for companies that spend the most on marketing their products. For public health practitioners the findings relating to brand awareness are concerning as sports wagering appears to be following the same ‘normalisation’ pathway seen with other products such as tobacco. Based on the data in this study and a previous model relating to EGMs proposed by Bestman and colleagues, we have proposed a model which shows how the current or future wagering consumption intentions may be shaped in children (Figure 1).

Second, children were much more likely than adults to recount descriptions of very specific marketing appeal strategies, including the creatives and incentives used within advertisements. They also more frequently described wagering promotions that were aligned with spontaneous events within sporting matches – such as the scoring of tries. This suggests that compared with adults, children are more attuned to the content of commercial break advertising and are also particularly aware of the marketing that is aligned with highly positive sporting moments. This may occur for a number of reasons, including adults ‘tuning out’ or engaging in other types of activities during commercial breaks. This provides further evidence in support of calls to close regulatory loopholes that allow gambling to be advertised before the watershed (the point in time after which adult programs are broadcast), as long as it is advertised during a sporting match, sports program, or news and current affairs program. While there have been repeated calls to close this loophole, the Australian Communications and Media Authority (ACMA) has been fiercely resistant, with the ACMA chairman claiming that the “the general gambling restriction is not relevant to sport”. This study’s findings suggest that the general gambling restriction is very relevant to sport and that ACMA should go further in preventing children’s exposure to wagering marketing. However, it is important to note that even if this regulatory loophole was closed, children would still be exposed to marketing embedded within sporting matches. Advertising regulations therefore need to be extended to consider all forms of marketing, including sponsorship promotions. It is important for researchers to work with sporting administrators, stadiums and broadcasters to ensure that they are aware of the research evidence relating to the impact of marketing on children, and the need for action that will protect children from these impacts.

Third, this study demonstrated that children specifically recall promotions which may give a perception of lessened risk or an increased chance of financial gain. These promotions included ‘cash out’, ‘refund bets’, and ‘cash back’ promotions. As proposed by Robertson and Rossiter, and Carter and colleagues in relation to children’s understanding of the persuasive intent of marketing, children in this study did not appear to understand the overall intent of specific promotions. In particular, this study suggests that promotions that imply ‘risk reduction’ (e.g. through ‘refund bets’) may be particularly influential in shaping children’s attitudes towards sports wagering, with some children interpreting these promotions as suggesting that there was no risk of financial loss from gambling. While further research is needed to understand how a range of promotions may influence children’s gambling risk/benefit perceptions, beliefs and attitudes, and future consumption intentions, these findings also have important implications for regulatory reform.

Finally, and perhaps most importantly, most children and the majority of adults believed that sports wagering was a ‘normal’ or ‘common’ part of sport. Children’s rationale for this was predominantly because they saw a lot of marketing for wagering during sport, and perceived that most people gambled on sport. Research on tobacco showed that children’s smoking behaviours were clearly influenced by their normative perceptions, i.e. they perceived that smoking was an activity that was both common, and socially valued and attractive. A key strategy for tobacco control advocates was to continually challenge the ‘exaggerated normalisation’ of smoking. Recent prevalence studies suggest that while the number of people who wager on sports is growing, it is still only a small proportion of adults. We would suggest therefore that children’s perceptions of products are highly influenced by the marketing messages and the volume of marketing they view. In tobacco, a range of strategies were employed to diminish perceptions that smoking was a common

---

**Figure 1: Proposed shaping pathway of how children’s exposure to sports wagering marketing may influence consumption intentions.**
activity. These included education campaigns which emphasised that smoking was not an activity that most people engaged in,28 that most people were ambivalent about smoking,34,35 and restricting tobacco advertising and promotions.34,35 Similar initiatives could be employed to ‘denormalise’ wagering. This could include research-based public education, alongside regulation which restricts messages in advertising that suggest that wagering is a normal activity for individuals, peer groups and sports fans, as well as significantly restricting the places where children observe marketing for wagering. These initiatives should be developed independently of the gambling industry.

There has already been some movement from sports administrators in relation to sponsorship relationships with wagering providers. Some Victorian sporting teams, especially in the AFL and A-League Soccer have signed charters in which they commit not to engage in sponsorship relationships with the wagering industry37 (although it is important to note that many of these teams still own EGM venues). However, while individual AFL teams have taken a stand against wagering sponsorship, the AFL as a code has been less responsive, with the CEO of the AFL defending sponsorship relationships with gambling providers as “legal and part of our game”, and important in accessing information for the integrity of the game.38 We would argue that integrity and community welfare are two distinct issues, and that the integrity of sport can be protected without the extensive exposure of young people to wagering promotions. There is a clear imperative for governments and sporting administrators to ensure that environments such as sport are not saturated with marketing for a veryadult product that may potentially cause harm.

Acknowledgement

Hannah Pitt is funded by an Australian Postgraduate Award provided via an Australian Research Council Discovery Grant (DP140102210). The larger study associated with this paper was funded by the Victorian Responsible Gambling Foundation Competitive Grants Scheme.

References

23. Sportbet Pty Ltd. Submission of Sportsbet Pty Ltd Parliamentary Joint Select Committee on Gambling Reform, Inquiry into the advertising and promotion of gambling services in sport. Parliament of Australia Joint Committee; 2013.

Children and sports wagering promotions

2016 ONLINE

Australian and New Zealand Journal of Public Health
© 2016 Public Health Association of Australia
Chapter 8. Factors that influence children’s gambling attitudes and consumption intentions: lessons for gambling harm prevention research, policy and advocacy strategies.

8.1 Chapter overview

This chapter contains the fourth publication in this thesis titled ‘Factors that influence children’s gambling attitudes and consumption intentions: lessons for gambling harm prevention research, policy and advocacy strategies’. This publication was submitted to the Harm Reduction Journal, an open access journal, with a Q1 ranking. It was first published on the 17th of February 2017.

https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-017-0136-3
8.2 Author declaration

1. Details of publication and executive author

<table>
<thead>
<tr>
<th>Title of Publication</th>
<th>Publication details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors that influence children’s gambling attitudes and consumption intentions: lessons for gambling harm prevention research, policies and advocacy strategies.</td>
<td>Harm Reduction Journal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of executive author</th>
<th>School/Institute/Division if based at Deakin; Organisation and address if non-Deakin</th>
<th>Email or phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah Pitt</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td><a href="mailto:hpitt@deakin.edu.au">hpitt@deakin.edu.au</a></td>
</tr>
</tbody>
</table>

2. Inclusion of publication in a thesis

<table>
<thead>
<tr>
<th>Is it intended to include this publication in a higher degree by research (HDR) thesis?</th>
<th>Yes</th>
<th>If Yes, please complete Section 3 If No, go straight to Section 4.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. HDR thesis author’s declaration

<table>
<thead>
<tr>
<th>Name of HDR thesis author if different from above. (If the same, write “as above”)</th>
<th>School/Institute/Division if based at Deakin</th>
<th>Thesis title</th>
</tr>
</thead>
<tbody>
<tr>
<td>As above</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td>Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions</td>
</tr>
</tbody>
</table>

If there are multiple authors, give a full description of HDR thesis author’s contribution to the publication (for example, how much did you contribute to the conception of the project, the design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)

Hannah Pitt significantly contributed to all aspects of the study. She contributed to the study design, conducted interviews, led the analysis of the data, and prepared the first draft of the paper. She also led the drafting and revision process of the manuscript.

*I declare that the above is an accurate description of my contribution to this paper, and the contributions of other authors are as described below.*

<table>
<thead>
<tr>
<th>Signature and date</th>
<th>20.11.17</th>
</tr>
</thead>
</table>

Signature Redacted by Library

4. Description of all author contributions

<table>
<thead>
<tr>
<th>Name and affiliation of author</th>
<th>Contribution(s) (for example, conception of the project, design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Amy Bestman, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Amy Bestman contributed to the analysis and critical revisions of the manuscript.</td>
</tr>
</tbody>
</table>
5. Author declarations
I agree to be named as one of the authors of this work, and confirm:
xvi. that I have met the authorship criteria set out in the Deakin University Research Conduct Policy,
xvii. that there are no other authors according to these criteria,
xviii. that the description in Section 4 of my contribution(s) to this publication is accurate,
xix. that the data on which these findings are based are stored as set out in Section 7 below.
If this work is to form part of an HDR thesis as described in Sections 2 and 3, I further consent to the incorporation of the publication into the candidate’s HDR thesis submitted to Deakin University and, if the higher degree is awarded, the subsequent publication of the thesis by the university (subject to relevant Copyright provisions).

<table>
<thead>
<tr>
<th>Name of author</th>
<th>Signature*</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Amy Bestman</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Mike Daube</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Jeffrey Derevensky</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
</tbody>
</table>

6. Other contributor declarations
I agree to be named as a non-author contributor to this work.

<table>
<thead>
<tr>
<th>Name and affiliation of contributor</th>
<th>Contribution</th>
<th>Signature* and date</th>
</tr>
</thead>
</table>

* If an author or contributor is unavailable or otherwise unable to sign the statement of authorship, the Head of Academic Unit may sign on their behalf, noting the reason for their unavailability, provided there is no evidence to suggest that the person would object to being named as author.

7. Data storage
The original data for this project are stored in the following locations. (The locations must be within an appropriate institutional setting. If the executive author is a Deakin staff member and data are stored outside Deakin University, permission for this must be given by the Head of Academic Unit within which the executive author is based.)

<table>
<thead>
<tr>
<th>Data format</th>
<th>Storage Location</th>
<th>Date lodged</th>
<th>Name of custodian if other than the executive author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic and paper copy of...</td>
<td></td>
<td></td>
<td>Samantha Thomas</td>
</tr>
</tbody>
</table>

This form must be retained by the executive author, within the school or institute in which they are based.
If the publication is to be included as part of an HDR thesis, a copy of this form must be included in the thesis with the publication.
Factors that influence children’s gambling attitudes and consumption intentions: lessons for gambling harm prevention research, policies and advocacy strategies

Hannah Pitt¹*, Samantha L. Thomas¹, Amy Bestman¹, Mike Daube² and Jeffrey Derevensky³

Abstract

Background: Harmful gambling is a public health issue that affects not only adults but also children. With the development of a range of new gambling products, and the marketing for these products, children are potentially exposed to gambling more than ever before. While there have been many calls to develop strategies which protect children from harmful gambling products, very little is known about the factors that may influence children’s attitudes towards these products. This study aimed to explore children’s gambling attitudes and consumption intentions and the range of consumer socialisation factors that may influence these attitudes and behaviours.

Methods: Children aged 8 to 16 years old (n = 48) were interviewed in Melbourne, Australia. A semi-structured interview format included activities with children and open-ended questions. We explored children’s perceptions of the popularity of different gambling products, their current engagement with gambling, and their future gambling consumption intentions. We used thematic analysis to explore children’s narratives with a focus on the range of socialising factors that may shape children’s gambling attitudes and perceptions.

Results: Three key themes emerged from the data. First, children’s perceptions of the popularity of different products were shaped by what they had seen or heard about these products, whether through family activities, the media (and in particular marketing) of gambling products, and/or the alignment of gambling products with sport. Second, children’s gambling behaviours were influenced by family members and culturally valued events. Third, many children indicated consumption intentions towards sports betting. This was due to four key factors: (1) the alignment of gambling with culturally valued activities; (2) their perceived knowledge about sport; (3) the marketing and advertising of gambling products (and in particular sports betting); and (4) the influence of friends and family.

Conclusions: This study indicates that there is a range of socialisation factors, particularly family and the media (predominantly via marketing), which may be positively shaping children’s gambling attitudes, behaviours and consumption intentions. There is a need for governments to develop effective policies and regulations to reduce children’s exposure to gambling products and ensure they are protected from the harms associated with gambling.

Keywords: Gambling, Marketing, Family, Media, Consumption, Children
Background
The impact of gambling on the health and wellbeing of individuals, families and communities has become an increasingly discussed and debated public health issue. With the advent of new technologies making gambling products and opportunities more accessible in our environment than ever before, governments are considering how best to respond to the potential risks and benefits posed by these potentially harmful products. While there has been significant and important evidence about the harms caused by some forms of land-based gambling, such as electronic gambling machines (EGMs, “pokies” or “slots”) [1–3], much less is known about the impacts of newer forms of gambling, such as online sports betting. This evidence gap is important given that many jurisdictions that have legalised online gambling are now playing “catch up” with regulatory frameworks seeking to prevent and minimise the harms associated with the provision and promotion of these products [4]. While many countries are currently considering the legalisation of sports and online betting [5], there is limited research evidence about the potential short- and long-term public health impacts of introducing these products, both on those who are legally allowed to gamble, and on children who are exposed to marketing for these products.

Australia provides an important case study for policy makers seeking to understand the impact of newer forms of gambling products on population subgroups [6]. Research suggests that excessive gambling may contribute to many different types of health and social harms, including financial harm, relationship conflict and breakdown, detriments to health, disruptions with study and/or work, cultural harm, and criminal activity [7]. Australians spend more money per capita on gambling than any other country in the world [8], with 2014/15 figures estimating that Australian adults spend on average $1241 per person on gambling each year [9]. While there have been decreases in participation in some forms of gambling, the largest increases in spend have been for online sports betting [9], and recent research estimates that about 11% of sports betting expenditure can be attributed to people who are classified as problem gamblers [10]. There have also been significant increases in advertising for some gambling products, with a 160% increase in advertising spend since 2011 [11]. Research has shown that sporting matches in particular have a high volume of marketing for gambling products [12–14]. This has stimulated considerable community debate about the impact of marketing on the normalisation of gambling for children, who make up a significant proportion of professional sport fans.

While most countries have a legal age for regulated forms of gambling (in Australia 18 years of age), evidence suggests that approximately two thirds to three quarters of children will have participated in some form of gambling in their pre-teen and teenage years [15–18]. While research shows that children mostly engage in “soft” forms of gambling such as lotteries or scratch cards, much of this research pre-dates the more pervasive and promoted online forms of gambling [17]. Similarly to adults, a broad range of harms are associated with children’s gambling behaviours, including mental health problems, issues associated with self-esteem and self-confidence, truancy, a reduction in academic performance, and other risk-taking behaviours [17, 19].

Children and gambling: the role of consumer socialisation
Theories relating to consumer socialisation have been central to research that seeks to understand how and why children decide to consume products that may be harmful for them. Defined by Ward (1974) as “processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace” [20] (pg. 2), socialising agents are factors that the “learner” interacts with and which are used to “transmit norms, attitudes, motivations and behaviours” [21] (pg. 600). They are traditionally associated with family, peers, and the media (including marketing) [21]. The impact and influence of these socialising agents can have a different effect on individuals depending on their life stage and individual make-up [20]. For example, in relation to marketing John (1999) has proposed that at different developmental stages, children start to develop different abilities and skills that they use in consumer decision making, others argue that new media environments mean that after a certain age parents have limited influence on children’s gambling attitudes and consumption intentions. For example researchers have shown that socio-cultural
factors, such as the influence of family members, and peers, may play important roles in facilitating children's gambling behaviours [24, 25]. Researchers have also demonstrated that children's first formal contacts with gambling are often via parents or family members [18, 25–28]. Children who believe that their parents gamble are more likely to want to try gambling themselves, and have higher rates of gambling [29]. Perceptions of the behaviours of peers may also influence young people's attitudes and consumptions intentions towards gambling products [25, 30]. For example, research has demonstrated that peer-based gambling may also lead children (and in particular girls) to gamble more than they would if they were on their own [31]. The perceived popularity of products also plays an important role in children's uptake of products [32]. However, there is very limited information about whether young people may perceive some types of gambling as being more popular, and perhaps more importantly what may influence these perceptions. While research has previously suggested that electronic forms of gambling are not particularly attractive for young people [33], these studies pre-date the newer and more pervasive forms of online gambling and the associated marketing for these products [34]. Furthermore, researchers have suggested that the emergence of gambling via digital media platforms may make gambling more "ubiquitous and socially acceptable" for children [35] (pg. 175). Finally researchers have investigated how gambling environments, and the promotion of gambling within these environments, may contribute to the normalisation of gambling in children. For example researchers argue that gambling may be normalised for children who attend gambling venues which are also promoted as "family friendly" [36] and that the alignment between gambling marketing and sport may have a significant influence on normalising gambling for young people [37, 38]. Research indicates that advertising may have an impact on children's recall of and preference for gambling products [38], their attitudes towards gambling [24, 34, 38] and their perception that gambling is a normal or common part of sport [37].

Concerned about the impact of gambling advertising on children, politicians, policy makers, the media, academics and community members in Australia and the United Kingdom (countries with significant amounts of televised gambling advertising) have strongly advocated for prohibiting the promotion of gambling prior to the watershed (the time at which adult content can be shown on television) [34, 39, 40]. However, there is very limited knowledge about how marketing may interact with other socialising agents to positively shape children's gambling attitudes, product preferences and consumption intentions.

The following study aimed to contribute to our understanding of how a range of consumer socialisation processes may shape children's gambling attitudes and gambling consumption intentions. The study was guided by three broad research questions:

1. Are there specific socialisation factors that may positively influence children's understanding and perceptions of the popularity of specific gambling products?
2. Do some factors appear to be more influential than others in shaping children's gambling attitudes and consumption intentions?
3. How can public health strategies be used to reduce the harms associated with socialising agents which are particularly influential in positively shaping children's gambling attitudes and consumption intentions?

Methods

Approach

The data presented in this paper was part of a broader study with parents and children investigating their attitudes and perceptions towards gambling. When developing this broader study, we utilised Constructivist Grounded Theory (CGT) methods in the development of research questions, and the collection and analysis of the data [41]. This is because we were interested in the social processes that may be influencing or shaping children's gambling attitudes and perceptions. CGT also describes the dynamic role that both researchers and participants play in co-creating meaning about a particular topic or issue [41], and has been used in a number of different studies investigating gambling behaviours [24, 42, 43]. CGT principles were applied in a variety of ways throughout the study. For example, our interest in socialisation factors led us to theoretically sample family groups so that we could investigate the interaction between parents and children.

The data presented in this paper focuses only on information relating to children in the sample. It uses a thematic approach to the interpretation of the data, which aimed to identify conceptual patterns and links within and between children's narratives specifically in relation to different gambling products. Ethical approval was received by the University Human Research Ethics Committee.

Recruitment

Parents and children aged 8–16 years old were approached to participate in the study in Melbourne, Victoria, from April to July 2016. We chose this age group because research suggests that from about the age of 8 children start to understand the persuasive intent of marketing campaigns [22]. Given the particular focus of this study on gambling and sport, children had to play or be a fan of Melbourne's major sporting code—the
Australian Football League (AFL)—to be included in the study. We invited children’s participation in the study via their parents, initially using convenience-sampling techniques to approach parents with information about the study using local community networks (such as sporting clubs and community groups). A snowball sampling approach was subsequently used requesting parents of children who participated in the study to recommend other families who might be interested in participating. Finally, purposive sampling techniques were used to reach specific types of young people who might have had different experiences with or attitudes towards gambling products [44].

Parents were provided with an information sheet about the study and asked to discuss participation with their child or children. Two researchers attended the interviews at the family home with the lead author conducting most of the interviews with the children. Children were provided with information about the study prior to their participation and verbal consent was obtained. Multiple children from one family were allowed to participate as previous research has shown that children within family groups may hold very different attitudes towards different products [34]. At the conclusion of the study, the family received a $30 gift voucher for each participating child.

Data collection

Face to face interviews were conducted with children using a semi-structured interview format. Interviews lasted between 25 and 45 min and were audiotaped with permission. In developing the interviewing techniques for this study, we considered in detail the potential power dynamics between the researchers and the children, as well as between parents and siblings, and how this could potentially influence children’s responses to the questions posed. We drew upon many of the processes described in other studies investigating the impact of gambling marketing on children [34, 37]. Children were interviewed away from parents and any other siblings. We utilised many “child-friendly” activities such as the use of picture boards at the start of the interview. We also thought extensively about the language that would be used when discussing gambling with children [45]. For example, previous research has shown that children are more likely to understand colloquial terms associated with gambling such as “betting” rather than the more formal term “wagering” [37].

In piloting the study, we also found that there was a degree of social desirability in children’s responses about gambling participation. In this context, we found that the framing of our questions was important in allowing children to expand upon their answers. Most children were aware that gambling was not allowed for children. For example, asking children if they wanted to “try sport betting” often elicited an immediate “no” response from younger children. However, if we followed this question with “what about when you are older, or when allowed to gamble?” young children were more open to discussing their gambling consumption intentions. It also provided us with an insight into the age at which children perceived that gambling was an acceptable activity. For example, some younger children described that they would engage in gambling as “teenagers” which they perceived was a more likely and “grown up” age for individuals to start to participate in gambling. We also noted that the structure of the interview was important. As such, we rearranged the order of questions for some children to introduce new concepts and to recall information that was discussed later in the interview [46].

Children were first asked general questions about themselves including their age and gender. This was followed by questions relating to children’s gambling behaviours. This included whether they had ever gambled before, which forms of gambling they believed were most popular, did they discuss gambling on sports with their family and friends, and which types of gambling, if any, would they like to try. A range of visual sociology techniques were incorporated throughout the interview as a creative way to stimulate discussion and to encourage children to think about questions in different ways [47]. Gambling is sometimes a complex issue for children to think about, and picture boards have been used in other studies to help children discuss their attitudes and opinions about different forms of gambling [37]. A number of interactive tools were used to prompt discussions about gambling. These included a picture board featuring pictures of eight forms of gambling—casino games, EGMs, horse racing, keno, lotteries, raffles, scratch cards, and sports betting. When speaking to children, colloquial language was used for some products, for example “scratchies” (scratch cards) and “poker machines” (EGMs). Children were then asked to circle the two forms of gambling they thought were the most popular (ranking their choices as first or second) and the activity they would like to try the most. Children were then asked qualitative questions about their choices.

Data analysis

Interviews were transcribed by a professional transcription company, with QSR NVivo 10 being used to manage the data. Data were analysed throughout the interviews, starting from the first interview. This was used to adjust the interview schedule and also to guide our sampling strategies. We stopped collecting data and finalised the analysis when all aspects of the data were able to illustrate a number of concepts, and could be categorised in a way that was clear and able to answer the research aims [44].
The first author led the data analysis process, reading the interviews in their entirety, and then within family groups. Qualitative notes were regularly taken throughout the analysis process, with the first two authors meeting regularly to discuss the concepts emerging from the data. As each interview was completed, a process of coding occurred, with the researchers initially identifying broad codes, revising these to more specific codes as the data analysis progressed. Narratives were read several times and the meaning associated with children’s responses was constantly discussed. Where we were uncertain about the interpretation, we sought advice from the other researchers, who provided feedback until an agreed interpretation was reached. Where appropriate, we inserted tables to represent the key categories that had emerged from the data, and how these linked with different attitudes towards different products or different influences on behaviour. This is presented in the “Results” section of the paper (Table 2).

Results
General and gambling characteristics
The general and gambling characteristics of the sample are presented in Table 1. We interviewed 48 children from 30 family groups. The majority of children were male (n = 41; 85.4%), with just over half of children aged 12–16 years (n = 25; 52.1%). When we asked children about their participation in gambling, we did not distinguish between formal or informal gambling. Rather, we asked whether children had ever gambled before and then asked them to describe what they had participated in. Just under 40% (n = 19, 39.6%) of children described having engaged in either formal (using money to place bets on organised events, usually through family members) or informal gambling (demonstrated gambling knowledge and behaviours through creating situations where a valued object was wagered for something positive in return). Children were asked about their current and future intentions to gamble. A third of children indicated no desire to gamble currently or in the future (n = 16, 33.3%), over a third said they would like to gamble in the future but did not indicate they would like to try gambling currently (n = 18, 37.5%), a quarter (n = 12, 25%) said that they would like to try gambling now and also when they were older, and two children (4.2%) said they wanted to try gambling now but did not have any intention of gambling in the future.

Three key qualitative themes emerged from the data.

Factors that influenced children’s perceptions of the popularity of different gambling products
The first theme explores children’s perceptions of the popularity of different gambling products and the factors that they believed contribute to this popularity. A summary of the main factors can be found in Table 2.

Sports betting, lotteries and horse race betting were the three forms of gambling that children perceived were the most popular forms of gambling. Children had similar reasons for the popularity of sports and horse race betting. First was that sports betting, unlike other forms of gambling, was based on “skill” rather than “luck”. For example, some children described that people would bet on sports because they know about the teams

<table>
<thead>
<tr>
<th>Table 1 Children’s general and gambling characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male                                               41 (85.4%)</td>
</tr>
<tr>
<td>Female                                             7 (14.6%)</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>8–11 years                                          23 (47.9%)</td>
</tr>
<tr>
<td>12–16 years                                         25 (52.1%)</td>
</tr>
<tr>
<td>Most popular producta</td>
</tr>
<tr>
<td>Sports betting                                      23 (47.9%)</td>
</tr>
<tr>
<td>Lotteries                                           22 (45.8%)</td>
</tr>
<tr>
<td>Horse racing                                        21 (43.8%)</td>
</tr>
<tr>
<td>EGMs                                                13 (27.1%)</td>
</tr>
<tr>
<td>Casino games                                        5 (10.4%)</td>
</tr>
<tr>
<td>Keno                                                5 (10.4%)</td>
</tr>
<tr>
<td>Scratch cards                                       4 (8.3%)</td>
</tr>
<tr>
<td>Raffle                                              2 (4.1%)</td>
</tr>
<tr>
<td>Gambling product children would like to try</td>
</tr>
<tr>
<td>Sports betting                                      17 (35.4%)</td>
</tr>
<tr>
<td>Lotteries                                           6 (12.5%)</td>
</tr>
<tr>
<td>Horse racing                                        6 (12.5%)</td>
</tr>
<tr>
<td>Casino games                                        6 (12.5%)</td>
</tr>
<tr>
<td>Scratch cards                                       5 (10.4%)</td>
</tr>
<tr>
<td>Raffles                                             3 (6.3%)</td>
</tr>
<tr>
<td>EGMs                                                1 (2.1%)</td>
</tr>
<tr>
<td>Keno                                                1 (2.1%)</td>
</tr>
<tr>
<td>No response                                         3 (6.3%)</td>
</tr>
<tr>
<td>Ever gambled</td>
</tr>
<tr>
<td>No                                                  29 (60.4%)</td>
</tr>
<tr>
<td>Yes                                                 19 (39.6%)</td>
</tr>
<tr>
<td>Consumption intentions</td>
</tr>
<tr>
<td>Desire to gamble in the future                      18 (37.5%)</td>
</tr>
<tr>
<td>No desire to gamble                                 16 (33.3%)</td>
</tr>
<tr>
<td>Desire to try gambling now and in the future        12 (25.0%)</td>
</tr>
<tr>
<td>Desire to try gambling now but not in the future    2 (4.2%)</td>
</tr>
</tbody>
</table>

aChildren could select two gambling activities as the most popular. The percentages reflect the number of children in the sample and not the number of choices.


Table 2  Factors that influenced children’s perceptions of the popularity of different gambling products

<table>
<thead>
<tr>
<th>Sports and horse race betting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game of “skill” not luck.</td>
</tr>
<tr>
<td>Prolifically marketed on television.</td>
</tr>
<tr>
<td>Aligned with culturally valued events.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lotteries and scratch cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chance of winning lots of money.</td>
</tr>
<tr>
<td>Perceived as less risky or “softer” forms of gambling.</td>
</tr>
<tr>
<td>Small amount of money required to enter.</td>
</tr>
<tr>
<td>Different lotteries available to enter.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EGMs and Keno</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children had seen the products before.</td>
</tr>
<tr>
<td>Children had negative views of the risks and financial losses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Casino games</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult entertainment.</td>
</tr>
<tr>
<td>Children had seen casinos in movies.</td>
</tr>
<tr>
<td>A specific place to gamble.</td>
</tr>
</tbody>
</table>

and “know they are going to win”, with one 13-year-old commenting:

Well, I think if you watch sport more, you’re more likely to be able to guess what team is going to win because you could know which team is in better form.—13-year-old boy

Second, children believed that sports and horse race betting were popular because they were prolifically marketed on television. Children commented on the amount of marketing that they had seen for these activities, including that they had seen “a lot of ads for sports betting”, “heaps and heaps of ads for it like everywhere”, “it’s always on TV” and that “the majority of betting ads are horse racing ads”. Third, children commented that these forms of gambling were aligned with culturally valued events (such as sporting matches, and the Melbourne Cup racing event). For example, some children commented that sports betting would be popular because “sport is on all the time” and that “lots of people watch sport”. Other children described that horse racing events, and in particular the Melbourne Cup, were popular in Melbourne, and meant “lots of people bet”. Children often had an exaggerated perception of the popularity of formal betting on the Melbourne Cup, with one child stating that “millions of people do it”, and another child commenting that “everyone kind of bets on that [the Melbourne Cup]”.

Different factors influenced children’s perceptions of the popularity of other forms of gambling. For example, children perceived that lotteries and scratch cards were popular because there was a chance of winning a lot of money on these forms of gambling. For example, one child described that with scratch cards people had a chance of winning “something even if it isn’t much money”. Children also rationalised that lotteries and scratch cards were popular forms of gambling because they were less risky as compared to other types of gambling. This was mostly because children perceived that only a small amount of money was needed to play. Children also considered that there were “a lot of different lotteries” to play which would increase the popularity of the product. The following child believed the chance of winning was enough incentive to make people want to enter lotteries:

Well I know a lot of people consider lotteries as like, they don’t really consider it as full on gambling. But they do it just because, the chances are not really in their favour but they do it because…the slim chance of winning that amount of money is just enough for them.—13-year-old boy

Those children who perceived that EGMs and Keno were popular chose these forms of gambling because they had seen them when having family meals at local pubs or clubs. Some children recalled seeing EGMs on specific occasions such as at “their beach house” and “through the window”. However, unlike other types of gambling, even when children chose EGMs as being a popular activity, they had a very negative view of the risks and financial losses associated with these games. Some children who thought that EGMs were popular also recalled that they were harmful for communities because of media attention relating to these machines:

There’s been a lot of talk about pokies recently on the news. And they rake in so much money each year. That’s why it’s such a big deal about getting rid of it.—15-year-old boy

One 8-year-old boy thought that EGMs were popular because they required people to continue to put money into them:

Because I know with pokie machines, you put money into them and then if you lose you have to keep on putting money in – until you’re poor.—8-year-old boy

Finally, a small number of children perceived that casino games were popular because they were considered as adult forms of entertainment. For example, a few children described that they thought adults “enjoyed a night out at the casino”, that they had seen casino gambling in movies, and that casinos were a specific place where people went to gamble.
Factors that influence children’s gambling behaviours

Nineteen children in this study described that they had engaged in gambling (either formally or informally). Two main factors influenced young people’s gambling consumption behaviours. The first was the influence of family members and other adults in participating in gambling, and the second was the link between gambling and culturally valued events. These two factors were often intertwined. While a few children specifically reported having gambled on scratch cards and on Keno, most children who had participated in gambling had bet money on horse races or sporting events: “I’ve done horse racing with one or two dollars”. Children’s gambling was mostly linked to betting with or against adults. Sometimes children described engaging in “fun” bets with family members and family friends. While these bets rarely involved money, they related to specific events during sporting matches, such as which player would kick the most goals. The following child described how he placed bets with a family friend, and with his grandmother, about specific outcomes associated with matches. The child emphasised that he had won the bets, and that the person he was betting against was expected to follow through with their agreement:

I bet my Dad’s friend 10 push ups if Geelong would beat the Western Bulldogs [AFL teams]. I won. I also bet my Nana 10 push ups that, Tom Hawkins or Daniel Menzel [Geelong Cats football players] would score the first score and Daniel Menzel did, so 10 push ups.—9-year-old boy

Most children bet with either their own pocket money, or money given to them by their parents. Children who had participated in betting on the Melbourne Cup horse race rarely perceived that they had been involved in gambling. For example, the following child stated that he had never gambled but had used his pocket money in a sweep for the Melbourne Cup:

No [I haven’t gambled]. Well, for the Melbourne Cup, we did a sweep, where I paid just like $5 or $10 of my pocket money.—10-year-old boy

Some children described that betting on the Melbourne Cup was an exception from gambling, because other than this event they had otherwise never participated in gambling.

Well, once my Dad let me put $10 on the Melbourne Cup but other than that, no [I haven’t gambled]—13-year-old boy

While some children gave examples of gambling with their parents or other family members, particularly during the Melbourne Cup horse race, they rarely conceptualised this as a “real” form of gambling and often reported never discussing gambling with their family. For example, some children stated that they did not really talk about gambling with their family unless “it’s the Melbourne Cup”, when they discussed “who we think is going to win” and how they were going to place bets on different horses. One child described how they picked horses: “we usually do it off their names and like the random kooky names.” Some children also described entering sweeps with their family. Another 8-year-old boy described the Melbourne cup sweep as an annual family event:

So we get a newspaper and we cut up all the names of the horses and then we give out an even amount to everyone. I put on a bet, but my Mum did it for me.—8-year-old boy

Factors contributing to current and future gambling consumption intentions

Finally, we explored the factors that influenced children’s reported future gambling consumption intentions. A third of children in this study indicated that they would never gamble. The main reason that children did not want to try gambling was related to a fear of losing money. This was mostly due to children remembering family discussions about gambling being a “waste of money”. Some children thought about adult-related scenarios such as needing to provide for a family when they were older, with one child describing that he would “get a job and make money, not try and win it that way.” These children also perceived that if they spent money on gambling they would not be able to afford other valuable items when they were older. For example one 8-year-old boy said he wanted to be able to spend his money on buying “a dog, house and car”.

Many other children described that they were curious about gambling and wanted to “see how it is” and “try it at least once”. However, other children were cautious about gambling, noting that it was something they would do “maybe a couple of times, but not often”, or would only gamble “just a few dollars”. Even when children said that they had discussed risks associated with gambling with their parents, some still indicated that they would like to try gambling “at least sometimes” when they were adults. Some clarified this by saying they would not gamble all the time, but would gamble only now and again “in case you get addicted”.

Four factors influenced young people’s current or future intentions to consume gambling products: (1) the alignment of gambling with culturally valued activities; (2) their perceived knowledge about sport; (3) the marketing and advertising of gambling products (and in particular sports betting) and (4) the influence of friends and family.
First, several children perceived that some forms of gambling, in particular sports and horse race betting, were a “normal” or culturally accepted activity. For example, one 11-year-old child stated that he would bet when “the bigger horse races are on”. Some children believed that it was almost compulsory for Australians to have a bet at least once on a major event:

It’s the kind of the thing you have to do at least once. Maybe something on a grand final [Football Match] or something.—14-year-old boy

Some children perceived that betting would make these events more fun and exciting, particularly if you were “winning some money.” For example, one 13-year-old boy said that he had thought about trying sports betting, but justified this response by saying that he “wouldn’t do it more than once or twice because then you might get addicted.”

Second, children who believed that they were knowledgeable about sports perceived that betting was an easy way to make money. These children believed that betting was a “skill” and that their knowledge about sporting events or teams indicated that they felt more confident about being able to pick winners by identifying “who is good and who is bad, who has the good defenders”. Children often stated that they would “probably bet on ‘my team’ sometimes” because it was the team that they knew the most about. A few children described that the most sensible time to bet was when there was a team or horse that would be a “clear winner” in a match or race. Children had a strong belief that knowledge of sports would positively influence the certainty of winning. For example, one 15-year-old girl explained that “if you have more knowledge about what team is better” you would be more likely to know who would win. The following 8-year-old also described the link between sporting knowledge both relating to teams and players and gambling success:

Well if you know a lot about the game you can usually pick the team that you reckon would win and then probably the best kick at goal.—8-year-old boy

Children who described very clear intentions to gamble when they were older described intricate scenarios where they would consider different betting options. Most of these scenarios involved AFL sporting matches. For example, the following 11-year-old using gambling language such as “punters” and “odds” described how he could use his understanding of gambling and the sporting form of two AFL teams to try to win more money. In this scenario, the child perceived that betting on the team with the longer odds and who was less likely to win would give him a chance of winning more money:

If it’s a clear winner or if it’s a really close game I might bet $10. Because I could get more money. And I would get more money, because I’d bet for a team that probably wasn’t going to win. If the odds were more, if the punters said Geelong [Geelong Cats AFL team] was going to win I’d probably go for Sydney [Sydney Swans AFL team] because it would be really close and they could win.—11-year-old boy

Third, children who had current or future gambling consumption intentions were strongly influenced by gambling advertising, particularly for sports betting. Children described that advertising made betting seem “easy” or “fun”, while others stated that gambling advertisements showed that “everyone wins”. Children described that advertising prompted them to actively think about trying gambling. For example, one 14-year-old boy described that he thought about trying gambling “when the ads constantly run”, telling the research team that he wanted to give sports betting “a crack”. Others stated that they thought about betting because of the incentives and promotions that were offered by betting companies. Children stated that taking up these incentives, in particular “cash back” or “refund” offers, would reduce their chance of losing money. For example, some children stated that they would gamble if there were promotions that offered “money back if your team is winning at half time but loses” or “if they say your team has good odds”. Incentive promotions were particularly influential in stimulating future consumption intentions for a few children who were unsure about whether they would gamble in the future. For example, a 10-year-old girl who was unsure about whether she would gamble when she was older said she would consider gambling if there was less risk involved. She went on to describe that “deals” promoted by bookmakers where she could get her money back if she lost, or would have a greater chance of winning a lot of money could encourage her to gamble:

Maybe if they had a deal or an ad and I think ‘oh I could get my money back if I do something or get heaps of money I might do it’.—10-year-old girl

Finally, a few children thought that friends and family members would influence their gambling when they were older. For example, a few children described that they thought “peer pressure” may play an influential role in gambling behaviours, or if it was normalised by “other people doing it around me.” Although family influences were a common theme that was influencing children’s current gambling behaviours, it was not as present in
children’s discussions of their future gambling consumption intentions.

Discussion and implications for harm reduction initiatives

Before discussing the results from this study, it is important to highlight the study limitations. First, the sample was skewed towards boys and younger children and did not specifically seek to measure differences between children from different socio-demographic and ethnic backgrounds. This should be considered in future studies. This study recruited children who were fans of the AFL, which is a sporting code that has significant saturation of gambling marketing within its sporting matches [12]. For this reason, the children in this study may have had a heightened perception of sports betting compared to children who are fans of other sports which are not as heavily sponsored by gambling companies, or for children who are not fans of sport at all.

Table 3 suggests areas for future research, as well as strategies that may help to reduce the potential harms posed by these products to children.

Children in this study had much lower actual participation in both formal and informal gambling (about 40%) as compared to other studies. The lower rates of participation in this study as compared to other studies [15–17] could be due to the younger age of this sample or that children were asked to talk about their gambling behaviours in a face to face interview (rather than an anonymous survey). Nevertheless, the findings in this study suggest that children as young as 8 years old showed both current and future intentions to participate in gambling, in particular, sports betting. This may indicate that education about the risks of gambling should begin prior to adolescence and should aim to counter the overwhelmingly positive messages children see about gambling. There is also a role for education initiatives and public education campaigns, so long as these are developed independently of industry and part of a comprehensive public health approach, providing young people and their parents with clear information about the marketing strategies and tactics used by the gambling industry to promote their products. These campaigns could also challenge perceptions that some forms of gambling (such as sports betting) are based on “skill”. Research from other areas of public health, such as alcohol and tobacco, have demonstrated that the involvement of industry in the development of education-based campaigns is ineffective in reducing harm and may be counterproductive [48]. Some researchers have suggested that this is because these industries (and governments) are unwilling to implement education strategies that may ultimately impact on their profits (or taxation revenue) [49, 50] and may be a contributing factor in increasing children’s positive perceptions about these products [48, 51]. The implementation of gambling education initiatives may also play a further positive role in encouraging the community to demand more responsibility from sporting codes and broadcasters about their marketing relationships with the gambling industry, and more accountability from government to regulate how the gambling industry is able to promote their products.

Despite online sports betting being a relatively new form of gambling in Australia, nearly half of children chose this form of gambling as one of the two most popular types of gambling, and about a third stated that given a choice, they would try this form of gambling over other gambling activities. Popularity of products, and the early and repeat exposure to advertising, has been shown to have a significant influence on children’s long-term, and risky consumption behaviours of harmful products such as alcohol and tobacco [52–55]. While longitudinal research will provide evidence for gambling consumption over time, there is no reason to expect that the consumption trajectory for the heavily advertised sports betting would be any different to products such as alcohol or tobacco. It would therefore be appropriate for governments to adopt precautionary principals of harm reduction, with the burden of proof on the gambling industry to show that the marketing of their products will not influence risky patterns of gambling in young people either currently, or in the future, before they are allowed to expose young people to marketing for their products.

Children who had clear intentions to consume sports betting products believed that they would have a chance of winning because of their knowledge of the sport. Past research has found that children are more likely to experience harm from gambling because of their

Table 3: Suggestions for future research and harm reduction

<table>
<thead>
<tr>
<th>Education campaigns</th>
<th>Regulation</th>
<th>Future research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Education for children about the risks of gambling.</td>
<td>1. Restricting gambling company advertisements from depicting gambling as a way of developing or building friendships and as a social activity.</td>
<td>1. Longitudinal research into children’s gambling consumption.</td>
</tr>
<tr>
<td>2. Education initiatives and public education campaigns for parents and children about the marketing strategies and tactics used by the gambling industry.</td>
<td>2. Restricting gambling advertisements from sporting events and television broadcasts.</td>
<td>2. Research to investigate the age at which peers may start to become influential in gambling behaviour.</td>
</tr>
<tr>
<td>3. Restricting gambling company advertisements that may have a high recall or appeal for young people.</td>
<td>3. Restricting gambling advertisements that may have a high recall or appeal for young people.</td>
<td>3. Research into newer gambling marketing techniques and the effect on children’s attitudes towards gambling.</td>
</tr>
</tbody>
</table>

misunderstanding of perceived skill in chance-based games [56–58]. In this study, children clearly perceived that sports betting and to a certain extent horse race betting, were based on skill rather than chance. The regulations governments have implemented suggest they are conscious of children’s exposure to sports betting advertisements [59]. However, in play sports betting advertising is still currently allowed during sporting events. The most effective harm prevention and reduction strategies should involve government regulation to significantly reduce children’s exposure to advertising, particularly within sports.

Three primary socialising agents were influential in shaping children’s gambling attitudes and consumption intentions: family members, and in particular parents, culturally valued events, and marketing. Before discussing these, it is important to understand the factors that did not appear to have an influence on children’s behaviours. Unlike other areas of public health, such as alcohol and tobacco [60–62], and in other gambling studies [26, 31, 57, 63], peers did not appear to play a significant role in influencing the gambling attitudes and consumption intentions of this group of children. Further research should investigate the age at which peers may start to become influential in gambling behaviours, particularly given that many recent campaigns for betting companies are dominated by concepts of mateship [64]. Research has indicated that there is a process of symbolic consumption with these marketing strategies, with young men’s peer-based gambling behaviours reflective of the themes within sports betting advertising [65]. Further, there is research that has reported that sports betting in particular is being used as a form of social and group cohesion amongst groups of young male sports fans [65]. While further research is needed into the impact of these newer marketing creatives on young people, one harm reduction strategy may be to prohibit gambling companies from promoting gambling as an activity that helps to build peer relationships, or is a natural addition or complement to social activities.

The factor that appeared to have the most influence on young people’s current and future gambling attitudes and intentions to gamble was marketing for sports betting. Research from other areas of public health such as alcohol has shown that marketing which reinforces alcohol as a fun, social activity is likely to reinforce children’s normative assumptions about drinking [66, 67]. As has been demonstrated in other gambling studies [34, 68, 69], marketing of gambling as a socially acceptable behaviour has created a perception that gambling was “easy” and “fun” and that sports betting was different from other forms of gambling because it was based on skill. In addition, the research has shown that specific forms of marketing, such as inducements, may impact on children’s gambling attitudes and consumption intentions, particularly for children who were unsure about whether they would gamble when they were older. Further, even though many children had never gambled on a sporting event, they were able to describe different gambling markets, betting options, and “deals”. While the sports betting industry argues that the marketing for their products does not target children [11], children are nevertheless exposed to and influenced by the marketing messages that they see. Although we would expect that adolescents would be influenced and receptive to these messages, it is concerning that very young children also appear to be influenced by messages which are increasingly aligned to activities that are popular with children, such as sport. Prohibiting marketing for gambling prior to the watershed is important in limiting young people’s exposure to marketing; however, we would argue that comprehensive harm reduction approaches must go further. This includes regulating marketing strategies, including those outside of traditional television advertising, that have high recall or appeal for young people.

Conclusions
This research suggests that a range of socialisation factors may be positively shaping children’s attitudes towards gambling products. As with other key areas of public health, a comprehensive approach to preventing the harms associated with gambling products will include a range of educational and legislative responses. Given the new pervasive forms of gambling products, and the marketing for these products, government responsibility for the development of effective policies and regulatory structures will be critical in ensuring that young people are not exposed to gambling products and promotions in their everyday environments. Researchers will play a key role in mapping and monitoring industry tactics and their impact on children and using research evidence to advocate for change.

Abbreviations
AFL: Australian Football League; CGT: Constructivist Grounded Theory; EGMs: Electronic Gambling Machines

Acknowledgements
We would like to acknowledge Ms. Jennifer David for her contribution to the data collection process. We would also like to acknowledge the members of the community who participated in this study.

Funding
This research is funded by an Australian Research Council Discovery Grant on Sports Wagering [DP140102210].

Availability of data and materials
This data will not be made available to ensure the privacy and confidentiality of the participants.

Authors’ contributions
HP was the lead researcher, she led the development of the analytical framework for the study, contributed to data collection and data analysis, and prepared the first draft and critical revisions of the paper. ST was the
principle investigator, conceptualised the study, contributed to data analysis and interpretation, and prepared the first draft and critical revision of the paper. AB was a researcher, and MD and JD the study investigators, they contributed to data interpretation, writing and critical revision of the study. All authors have read and approved the final manuscript.

Competing interests
The authors declare that they have no competing interests.

Consent for publication
Participants consented to the data being used for publications.

Ethics approval and consent to participate
Ethical approval was obtained from the University of Wollongong Human Research Ethics Committee. Parents provided written consent and verbal consent was obtained from children.

Author details
1Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Deakin University, 221 Burwood Highway, Burwood, Victoria 3125, Australia. 2Faculty of Health Sciences, Curtin University, Perth, Australia. 3International Centre for Youth Gambling Problems and High Risk Behaviours, McGill University, Montreal, Canada.

Received: 15 November 2016 Accepted: 2 February 2017
Received: 15 November 2016 Accepted: 2 February 2017

Published online: 17 February 2017

References

9.1 Chapter overview

This chapter contains the fifth and final publication in this thesis titled ‘What do children observe and learn from televised sports betting advertisements? Influences, impacts and public health advocacy responses’. This publication was submitted to the Australian and New Zealand Journal of Public Health, an open access journal, with a Q2 ranking. It was first published on the 18th of October, 2017.

9.2 Author declaration

1. Details of publication and executive author

<table>
<thead>
<tr>
<th>Title of Publication</th>
<th>Publication details</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of executive author</th>
<th>School/Institute/Division if based at Deakin; Organisation and address if non-Deakin</th>
<th>Email or phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah Pitt</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td><a href="mailto:hpitt@deakin.edu.au">hpitt@deakin.edu.au</a></td>
</tr>
</tbody>
</table>

2. Inclusion of publication in a thesis

<table>
<thead>
<tr>
<th>Is it intended to include this publication in a higher degree by research (HDR) thesis?</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>If Yes, please complete Section 3 If No, go straight to Section 4.</td>
<td></td>
</tr>
</tbody>
</table>

3. HDR thesis author’s declaration

<table>
<thead>
<tr>
<th>Name of HDR thesis author if different from above. (If the same, write “as above”)</th>
<th>School/Institute/Division if based at Deakin</th>
<th>Thesis title</th>
</tr>
</thead>
<tbody>
<tr>
<td>As above</td>
<td>Centre for Population Health Research, School of Health and Social Development, Faculty of Health.</td>
<td>Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions</td>
</tr>
</tbody>
</table>

If there are multiple authors, give a full description of HDR thesis author’s contribution to the publication (for example, how much did you contribute to the conception of the project, the design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)

Hannah Pitt significantly contributed to all aspects of the study. She contributed to the study design, conducted interviews, led the analysis of the data, and prepared the first draft of the paper. She also led the drafting and revision process of the manuscript.

*I declare that the above is an accurate description of my contribution to this paper, and the contributions of other authors are as described below.*

<table>
<thead>
<tr>
<th>Signature and date</th>
<th>20.11.17</th>
</tr>
</thead>
</table>

Signature Redacted by Library

4. Description of all author contributions

<table>
<thead>
<tr>
<th>Name and affiliation of author</th>
<th>Contribution(s) (for example, conception of the project, design of methodology or experimental protocol, data collection, analysis, drafting the manuscript, revising it critically for important intellectual content, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Samantha Thomas contributed to all aspects of the study including the study design, drafting of the manuscript, and critical revisions.</td>
</tr>
<tr>
<td>Amy Bestman, Centre for Population Health Research, School of Health and Social Development, Faculty of Health, Geelong, Victoria, Australia.</td>
<td>Amy Bestman contributed to the analysis and critical revisions of the manuscript.</td>
</tr>
</tbody>
</table>
5. **Author declarations**  
*I agree to be named as one of the authors of this work, and confirm:*

xxi. *that I have met the authorship criteria set out in the Deakin University Research Conduct Policy,*

xxii. *that there are no other authors according to these criteria,*

xxiii. *that the description in Section 4 of my contribution(s) to this publication is accurate,*

xxiv. *that the data on which these findings are based are stored as set out in Section 7 below.*

*If this work is to form part of an HDR thesis as described in Sections 2 and 3, I further consent to the incorporation of the publication into the candidate’s HDR thesis submitted to Deakin University and, if the higher degree is awarded, the subsequent publication of the thesis by the university (subject to relevant Copyright provisions).*

<table>
<thead>
<tr>
<th>Name of author</th>
<th>Signature*</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Thomas</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Amy Bestman</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Mike Daube</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
<tr>
<td>Jeffrey Derevensky</td>
<td>Signature Redacted by Library</td>
<td>22 Nov 2017</td>
</tr>
</tbody>
</table>

6. **Other contributor declarations**  
*I agree to be named as a non-author contributor to this work.*

<table>
<thead>
<tr>
<th>Name and affiliation of contributor</th>
<th>Contribution</th>
<th>Signature* and date</th>
</tr>
</thead>
</table>

* If an author or contributor is unavailable or otherwise unable to sign the statement of authorship, the Head of Academic Unit may sign on their behalf, noting the reason for their unavailability, provided there is no evidence to suggest that the person would object to being named as author.

7. **Data storage**  
The original data for this project are stored in the following locations. (The locations must be within an appropriate institutional setting. If the executive author is a Deakin staff member and data are stored outside Deakin University, permission for this must be given by the Head of Academic Unit within which the executive author is based.)

<table>
<thead>
<tr>
<th>Data format</th>
<th>Storage Location</th>
<th>Date lodged</th>
<th>Name of custodian if other than the executive author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic and paper copy of transcripts</td>
<td>Deakin University</td>
<td>Various</td>
<td>Samantha Thomas</td>
</tr>
</tbody>
</table>

*This form must be retained by the executive author, within the school or institute in which they are based.*

*If the publication is to be included as part of an HDR thesis, a copy of this form must be included in the thesis with the publication.*
What do children observe and learn from televised sports betting advertisements? A qualitative study among Australian children

Hannah Pitt,1 Samantha L. Thomas,1 Amy Bestman,1 Mike Daube,2 Jeffrey Derevensky3

Sports betting is a rapidly emerging sector of the gambling industry. In Australia, which has the largest per capita gambling spend in the world,1 sports betting is one of the few forms of gambling that has shown a substantial increase in participation in recent years.2 For example, although sports betting is not the largest sector of the gambling industry, in 2014-2015 Australians spent more than $800 million on regulated sports betting—a 30% increase from the previous time period.3 Although there is very limited research into sports betting, the recent Household, Income and Labour Dynamics in Australia project (a nationally representative longitudinal study) found that 3% of participants gambled on sports at least monthly.4 A Victorian study by Thomas and colleagues [2017] found that one-third of participants had gambled on sports during the last twelve months, with 14% of these people gambling on sports at least weekly.5 Roy Morgan Research [2016] found that 1 in 15 people who watched either the Australian Football League (AFL) or National Rugby League (NRL) grand finals placed a bet.6 Young men (aged 25–34 years) reported the highest gambling rates on these events, with just under 10% of viewers gambling on at least one of the grand finals.6

Increases in consumer spending on betting have been matched by significant increases in the amount of money spent by the betting industry on the marketing of its products. In Australia, Standard Media Index figures showed a 160% increase in advertising spend (2011-2015), with $236 million spent on gambling advertising in 2015, the majority from sports betting companies.7 Many sports teams or sporting organisations across the AFL, NRL, Tennis Australia and Cricket Australia benefit financially from lucrative sponsorship deals,8,9 with sporting codes receiving a percentage of revenue from every bet placed on matches with official betting partners of the code.

The rapid expansion of marketing for betting products and the increased consumption of these products has led to concerns about the short and long term health and social impacts of sport betting on population subgroups, and particularly on children (although the legal gambling age is 18 years old).10 This has led to some consideration closing regulatory loopholes that allow the

**Abstract**

**Objective:** To explore children’s awareness of sports betting advertising and how this advertising may influence children’s attitudes, product knowledge and desire to try sports betting.

**Methods:** Semi-structured qualitative interviews were conducted with 48 children (8-16 years) from Melbourne, Victoria. The interview schedule explored children’s recall and interpretations of sports betting advertising, strategies within advertisements that may appeal to children, children’s product knowledge and understanding of betting terminology, and factors that may encourage gambling. Interviews were transcribed and thematic analysis was conducted.

**Results:** Children recalled in detail sports betting advertisements that they had seen, with humour the most engaging appeal strategy. They were also able to describe other specific appeal strategies and link these strategies to betting brands. Many children described how advertisements demonstrated how someone would place a bet, with some children recalling the detailed technical language associated with betting.

**Conclusions:** Children had detailed recall of sports betting advertisements and an extensive knowledge of sports betting products and terminology.

**Implications for public health:** To protect children from the potential harms associated with sports betting, governments should consider changing regulations and implementing evidence-based education campaigns to counter the positive messages children receive from the sports betting industry.

**Key words:** children, advertising, sports betting, gambling
Promotion of sports betting products before the watershed (the time at which adult content is allowed). \(^{1,3,12}\) Currently, restrictions on gambling advertisements are limited to regulatory Codes of Conduct, which stipulate the times advertisements can be shown and very broad statements about the content of advertisements. \(^{13}\) For example, gambling advertisements cannot be shown during children’s viewing hours except for during news, current affair and sporting programs. Industry codes have agreed to ensure marketing does not contain themes that may be directed at children and must not show young adults (under 24 years) gambling. \(^{14}\) The Australian government has recently made a commitment to restrict advertising during live sporting matches up to 8.30pm, although as yet this is no more than a commitment. \(^{15}\) Recent research has shown that there is significant community support for complete bans of gambling advertising during sporting matches, including at sports stadiums, and strong public agreement that sporting organisations should take more responsibility for the promotion of gambling in sport. \(^{1}\) While debates surrounding changes and updates to current regulations are ongoing, researchers have sought to identify: a) the range of specific creative strategies within advertisements that may appeal to children and; b) how promotional strategies used by the betting industry may shape the gambling attitudes and consumption intentions of children. \(^{10,16,17}\)

**Advertising strategies and the impact on children’s attitudes and consumption intentions**

Research in other areas of public health, such as tobacco and alcohol, has demonstrated the link between advertising strategies, children’s levels of exposure to these strategies and their intentions to consume these products. \(^{18,19}\) For example, research has indicated that some specific types of strategies, including humour, the use of characters, including cartoon characters, and promotions that are either directly or indirectly aligned with celebrities and sports heroes may have an additional influence on children’s brand awareness and preference. \(^{20-22}\) There have been some attempts to explore the impact of different gambling advertising strategies on children, largely focused on children’s recall and interpretation of the messages within advertisements. \(^{18,19,21-23}\)

These studies demonstrate that children perceive that advertising depicts gambling as a fun activity, an exciting and easy way to win money, and a form of entertainment. \(^{23,24}\) Research focusing on newer forms of gambling, such as online sports betting, shows that children have a significant recall of sports betting brands when they are aligned with culturally valued activities such as sport, as well as specific recall of advertising creatives, plot lines and promotions. \(^{25,26}\) Researchers have also demonstrated that the alignment of marketing for these products with sport may be having an influence on normalising children’s perceptions that gambling is a ‘normal’ or ‘common’ part of sport, \(^{10,26,27}\) and that children’s recall of inducement and incentive promotions used by sports betting companies, such as ‘free’ bets and ‘cash back’ offers, may reduce children’s perceptions of the risks associated with gambling. \(^{28}\)

What is less clear from existing research is whether the marketing tactics used by the gambling industry may also be role modelling gambling behaviours. Are strategies used within marketing campaigns creating processes whereby children are being ‘educated’ about the more technical aspects of gambling, including gambling markets, odds, and how to practically place bets on mobile devices?

**Observational learning and the role of the mass media**

Researchers have argued that the mass media (including advertising) play an influential role in observational and social learning processes associated with unhealthy products. \(^{29}\) For example, researchers termed tobacco advertising as a “super peer” because of its ability to demonstrate products, align these products with positive values, and constantly reinforce products to children and adolescents. \(^{30-32}\) Advertising may be particularly influential in positively shaping children’s attitudes if they are not exposed to behaviours via other role models (such as parents), or have not been exposed to the negative attributes associated with using a product. \(^{29}\) While previous gambling research has suggested that parents are a primary role model for gambling behaviours, \(^{34}\) some research has found that adults over 35 years of age do not have very high participation rates for sports betting. \(^{2}\) There is emerging evidence to suggest that children are able to recall and interpret basic betting terminology, \(^{16}\) and are able to indicate different events they would gamble on. \(^{36}\) How then are children learning this very specific information about betting?

The following study aimed to address this gap by exploring how marketing processes may contribute to children’s awareness and engagement with advertisements, their attitudes and desires to reproduce sports betting behaviours, and their specific knowledge about the technical aspects of betting. Four research questions guided this research:

1. To what extent do children recall specific appeal strategies within advertisements, and are they able to distinguish promotions used by different brands?
2. Are there factors within advertising that may create an exaggerated perception that sports betting is a common or normal activity for sports fans?
3. Does advertising influence children’s technical knowledge about betting?
4. Are there specific factors relating to advertising that may influence children’s willingness to engage in betting on sports?

**Methods**

**Approach**

This study took a qualitative approach. Qualitative approaches allow researchers to explore a “complex setting and complex interaction” \(^{37}\). This is commonly found through qualitative techniques such as interviews where participants, and in this study children, are able to explore and explain their attitudes and behaviours more openly than quantitative methods.

**Sample**

As part of a broader study, \(^{28}\) we recruited family groups in Melbourne, Victoria, comprising of at least one child aged 8 to 16 years old, and one parent or caregiver (with this paper presenting only the data collected from children). To be included in this study, children were required to be self-identified fans of the AFL. This recruitment criterion was employed, as researchers have demonstrated a significant amount of promotions for sports betting aligned with televised AFL matches, \(^{38}\) as well as prominent sponsorship relationships between the AFL and online gambling companies. \(^{21}\) Research has also demonstrated that children who are fans of the AFL have high levels of exposure to, and
Recruitment strategies
We utilised a range of convenience, snowball and purposive recruitment techniques to identify family groups.33 Information about the study was initially distributed via local community and sporting groups, with participating parents asked to share information about the study with others. Written consent was obtained from parents, and verbal consent was received from children. All children were given a $30 gift voucher for participation. Ethical approval was received from the University Human Research Ethics committee.

Data collection
Two researchers conducted in-depth semi-structured interviews between April and July 2016. One researcher conducted interviews with the parent or caregiver, while the other conducted interviews with the children. All interviews were performed out of hearing distance from other family members and mostly occurred within residential houses.

For the data presented in this paper we were particularly interested in children’s knowledge of sports betting products, the marketing for these products, and betting attitudes. We structured this part of the interview into a number of different sub-sections.

The first set of questions explored children’s recall, attitudes and interpretations of sports betting advertising. Examples of questions included “can you tell me any ads you have seen for sports betting?”, “are there any deals or promotions that you can remember”, and “what do you think those deals and promotions mean?” Children were also asked about the different strategies within sports betting advertisements that may appeal to children, increase children’s perception that gambling is a normal behaviour and encourage people to want to try gambling.

We then asked questions to assess children’s knowledge of sports betting products and behaviours, including how they thought an adult might place a bet on sports.

Data interpretation
Interviews were transcribed by a professional transcription company and were uploaded to the data management software program QSR NVivo 11. Thematic analysis was conducted whereby transcripts were read and re-read to establish main themes, notes were continuously made, and the themes were compared and contrasted across the children.33 Open coding was used to identify the key themes from the data and was conducted throughout the data collection process to ensure that coding could evolve and to ensure that all data were represented in the themes.33 Data interpretations were led by Authors One and Two, with regular meetings with the co-authors used to discuss the key themes and their meanings.

Results

Demographics
Thirty family groups (comprised of 48 children) participated in the study. The mean age of the sample was 11.4 years old (SD=2.1), and was skewed towards boys (n=41, 85.4%). All children identified that they were AFL fans. More than half the children said that they watched sports once a week (n=25, 52.1%), a further 20 children said they watched sports more than once a week (41.7%) and only three children reported watching sports less than once a month (6.3%).

Four main themes emerged from the data. Advertising strategies that influenced children’s attention towards, and recall of, betting brands
There were a range of strategies that influenced children’s awareness and retention of information about gambling advertising, and gambling brands. Some children in this study were able to describe specific attention strategies and/or messages that they had seen within gambling advertisements.

Children were aware of and recalled strategies that included humour, distinctive voiceovers, and celebrities, with some children able to align these strategies with specific brands. Humour was the appeal strategy that led to the most awareness of gambling brands. Children in this study stated that they recalled advertisements that were funny or believed that sports betting companies “make them [advertisements] really funny.” Some children recalled storylines within advertisements, particularly from the sports betting company Ladbrokes. For example, children described an advertisement that showed two men gambling, and the children then recalled, “one guy gets locked outside in the pouring rain” and “the guy outside was getting soaking wet.” Another child recounted a different advertisement that also featured slapstick humour:

> I do remember one that was funny, it was one where they were watching sport and they were on their phones and they bet and then they were like, ‘if you win then I’ll take off my pants’ or something stupid like that.

(13-year-old girl)

A few children also had an awareness of advertisements that contained very distinctive voices or voiceovers. This was often associated with the betting company Ladbrokes. For example, children described the British accent used by actors within Ladbrokes advertisements as “hard to forget” and one girl said, “I liked the Ladbrokes ads because of the accents, it kind of engaged me”. Sportsbet advertisements were also remembered as being “loud”, “rough” and “shouty”:

> Well, most of the ads, the person that’s saying the stuff has like a really memorable voice, like the guy from Ladbrokes has an accent and the guy from Sportsbet has like a shouty sort of voice.

(13-year-old boy)

Children also remembered brands that contained recognisable celebrities, in particular from Ladbrokes, and Bet365. A few children described characteristics associated with Australian actor Gary Sweet, who featured in advertisements for Ladbrokes. For example, children described, “the guy with the bald head” or “the guy from House Husbands (an Australian prime time television program)”. Hollywood actor Samuel L. Jackson was also identified by some children as featuring within the Bet365 advertisements, with a few children describing the specific impact this would have on other children.

For example, one child thought that by using Samuel L. Jackson children would remember the Bet365 advertisements because, “most kids would remember seeing him from superhero movies” (Jackson also appears in The Avengers movie series). Another child thought people would want to copy Samuel L. Jackson because “they would probably do what he does, because they want to be like him”.

Children in this study were able to identify brand names, and brand-specific advertisements. While brand recognition and recall was more common among children over 12 years old, children as young as eight years old were able to link specific promotions with brands, or note that there were different advertisements within a broader campaign:
In the Bet365 one, there’s like a man that runs the Bet365 [company] and then there are some other people that are members of Bet365 – there’s two different ads of them. One of them is where there are different people saying, ‘I am a member of the world’s favourite online sports betting company’. And then the guy sitting on the couch saying ‘I am a member of Bet365.’ (8-year-old boy)

Some children recalled more sophisticated promotions, particularly aligned with bookmakers Ladbrokes and Sportsbet. For example, children described that the Ladbrokes ‘odds boost’ promotion was activated by pressing a button on the app and you could get increased odds for that event, “there’s a new Ladbrokes ad and there’s an odds boost thing where you press a button and it makes your odds go higher”. While children repeated the catchphrases or taglines for these promotions, they rarely understood what these promotions meant in practice. For example, some of the children who identified the odds boost promotion thought it was, “boosting your odds but I don’t know how”.

Advertising strategies that increased the perception that sports betting was a normal activity

The second theme to emerge from the data related to how messages within advertising created a perception that betting on sports was normal behaviour for sports fans. The first factor related to the positive framing of gambling as an easy, fun and social activity. Children perceived that betting was a normal activity for sports fans because sports betting companies “make it easy”, and that sports betting advertisements show “how easy it is to bet”. One child recalled how the advertisements linked the message that gambling was easy with the image of an actor demonstrating the behaviour on their mobile phone:

Then he’s got his phone and then he like says ‘You should bet now it’s really easy’ and then he switches his phone a bit and then he gets it up and pretends to click the team. (13-year-old boy)

Children also described the positive messages about winning within advertisements. For example, some children described that betting advertisements consistently “shows people winning”; “someone wins and they all go crazy” and “they always show at the end [of the advertisement] people winning”. A few children reflected that there were “no ads about if you lose”, and that sports betting advertisements “make it sound like it’s fine and nothing will happen”, with a few children perceiving that the advertisements portrayed gambling as an easy and fast way to earn large amounts of money.

The second factor influencing children’s perceptions that sports betting was a normal activity was the social messages within betting advertisements that portrayed sports betting as an activity associated with friendship. This commonly included children retelling advertisements that showed mostly groups of men gambling together. Children said sports betting companies showed “everyone having fun”, people betting while “socialising with their friends” and “people having a good time while doing it [sports betting]”. When talking about sports betting advertising a few children thought that it gave the impression that betting was a fun thing to do with your friends:

They [the sports betting advertisements] usually involve a group of people having a lot of fun, watching it [sport] and then it shows them actually placing their bet online and they make it seem like it’s really normal and just a fun thing to do with your friends. (12-year-old boy)

Finally, children described that these positive messages about gambling were given frequently during sporting events and that this exposure made betting appear like a ‘normal’ activity. Some children said they thought that because there were more advertisements for betting, including discussions by commentators, this meant that betting was an activity that was popular or ‘normal’. As an example, one girl stated that the frequency of commentary about sports betting made her feel that more people were gambling on the sport:

When there are ads and stuff on TV or the commentators say the odds, it makes you feel like there are a lot more people doing it. (15-year-old girl)

Advertising strategies that influenced the technical knowledge of betting

Many children described knowing where they could bet because of marketing that they had seen on television or from the presence of sports betting operators at different community venues they had visited (such as sports stadiums). Most children recalled that people bet on sports via mobile or Internet based technology. Children’s knowledge about online gambling came from a range of sources. A few children had seen apps for sports betting providers promoted on the app store. One boy commented:

Apps on the featured charts on the app store of like sports bet and stuff and it says free downloads and get this game so that people get the app and bet on the app. (10-year-old boy)

Children described how the messages within sports betting marketing demonstrated how to bet on sports: for example, one child described that the advertisements “show you how to do it”. Children described the steps involved in placing bets: first that you would download an app - it’s ‘easy to download the app’ and to then “just go on an app”. Older children described the processes associated with creating an online account for a sports betting company, stating that people would, “log in and put in their credit card details”. Some children demonstrated specific knowledge of selecting markets to gamble on, stating that you would add money to your betting account, select a price and then select a team or a player to bet on. Children used their recall of the content of advertising to describe the range of betting options that were available, with some commenting that you could bet on anything. Some children also described the factors that people would have to consider when placing a bet, such as which team would win, what they thought the final score would be, who would be the first goal scorer, who might get injured during the game, and “what the ladder is going to be like at the end”.

Many children also remembered seeing or hearing technical aspects associated with gambling and had particular recall of betting odds. Children remembered hearing the odds of teams or outcomes of the game while watching television and sporting broadcasts. There were a few children who identified that sporting commentators provided the odds – “the footy commentators normally say the odds”. While younger children were less aware of the specific term ‘odds’, some indicated that there were “numbers at the bottom of the screen” that were linked with betting. Other older children demonstrated their knowledge of betting markets by discussing and describing the term ‘odds’. Some children described odds as “the chance of something happening” while other descriptions were often associated with winning or money. For example, one child thought odds were a “way of telling who would win”, while another said it tells you “how much money you could
Some children could describe the lower odds as being the option that was most likely to win and others had a relatively accurate understanding of how odds were generated. One boy reported that he had seen odds on an app and explained that if a team had low odds it meant that they had a better chance of winning:

“Like on the AFL app, I tapped on a team to see when [AFL team] Hawthorn was playing and it came up with the odds and I think they were playing some other team and they were like $1.35 and the other one was like $4 something. So the lower the money, the better chance they have of winning. So when Hawthorn was really low, it means that everybody thought that they’d win. And if you bet $1, you might only get $1.35 back.”

(10-year-old boy)

Finally, there was evidence that a few children were applying gambling information to non-gambling-based football tipping competitions. For example, children stated that they checked the odds to help guide them with their ‘footy tipping’ selections, with one child saying they would pick the team with the “least amount of money next to it”, or that “the odds will help me” when they did not know which team to tip. The following boy described using odds as a way of clarifying who he thought might win:

“Yeah, with my footy tips I use the odds sometimes, like if [the odds] say that someone's going to win, I go, oh yeah maybe they will.”

(13-year-old boy)

### Advertising strategies that specifically shaped intentions to gamble

Recall of promotions that created a reduced monetary incentives for betting, or created a “safety net” for gamblers. Children described that cash back and refund offers enabled people to “get your money back without losing money”, or that if someone “changed their mind” they could get out of the bet. One child stated that the term ‘cash back’ “seems like a good word even if you don’t understand it”, while other children thought the sports betting advertisements made it appear that “it’s hard to lose”, that the ads, “say you’re very unlikely to lose”; or that these promotions gave them the belief they could “get some money even if you don’t win”. There were a few children who rationalised which scenarios would be the best option to ‘take up’ these promotions. For example, one child described how the ‘cash back’ option could be a good idea for him because he had knowledge about his team’s usual performance:

“Well with the cash back one it’s like, if I know my team is a good starter so they will definitely win the first quarter but not a good finisher I’ll just take my cash out. And with cash back if I think it’s not looking too good I’ll just get my money.”

(14-year-old boy)

Although most children did not indicate an intention to use these promotions, there were a few children who did believe that promotions could encourage adults and some children to gamble. Several children described that these types of deals would be influential in encouraging children or adults to place bets in the future, with one child stating that if you received this type of offer it meant that betting was probably “worth a try”. One child thought the promotions showed gambling to be a “good and normal thing to do” and another thought the promotions might “raise children to be more positive about gambling”.

### Discussion

This study aimed to explore whether there are certain aspects relating to the promotion of sports betting that may influence children’s recall of specific gambling brands, their perception that betting on sports was a normal activity, their knowledge of the technical aspects of betting, and their intention to gamble. The findings from the study raise a number of points for discussion. First, while there have been previous studies that have demonstrated children’s ability to recall sports betting company brands,9,10,11 this study demonstrates that some children were able to recall specific strategies used within advertising messages and correctly link these strategies to specific brands. Children have been described as a “lucrative target group”9 because of both the consumption behaviours as children and their future consumption behaviours as adults. As demonstrated in relation to tobacco, building brand loyalty – particularly during adolescence – was an important part of industry strategy in developing brand preferences into adulthood.39 While there is no evidence to indicate that sports betting brands are specifically seeking to build brand loyalty with children before they are legally able to gamble, the strategies utilised within their advertising nevertheless had a strong impact on attracting children’s attention and recall of specific brands. Four strategies emerged as the most influential - humour, strong voices, celebrities and catchy promotions. While each of these strategies had very clear impacts, humour was the strategy that appeared to have the most influence on children’s brand awareness and recall. Humour has regularly been identified as an attention strategy in promotions for other unhealthy products (such as alcohol), and as having a significant appeal and persuasive impact on children.38,21 Research indicates that humour is a regularly used strategy in both television and online advertising for sports betting agencies.38,39 It is therefore concerning that humour had the strongest influence on children’s recall of advertisements. Children were attracted to the wit, physical humour and jokey voices used within these advertisements. While
voluntary codes of conduct developed by the advertising industry state that advisements must not be directed at minors, humour is not specifically identified in this code.14 This appears to be a glaring omission, providing additional evidence in support of a revision of government advertising standards that do not comprehensively address strategies used by gambling companies that may appeal to children.15 Given that research into cigarette advertising shows a link between exposure, liking, and the appeal of smoking,16 future research should further investigate the links between specific advertising strategies, their ‘likeability,’ brand loyalty, and children’s intentions to gamble.

Second, there were also elements within betting advertising that created a perception among some children that gambling was a normal or common activity for individuals to engage in. Consistent with other gambling research,23-25 these strategies were primarily linked to the perception that advertising portrayed gambling as easy, with a certainty of winning, and that betting was an integral part of friendships. Despite regulations that prevent sports commentators from providing odds during the match,13 children still perceived that members of the commentary team provided odds. This could mean that bookmaker commentary-style advertising is still being perceived by children as sports commentators providing odds-based commentaries. These factors, coupled with saturated marketing during sports coverage, created a perception that many people gambled on sports. These are similar findings to those that have been identified for decades in both tobacco and alcohol research, indicating that children who were exposed to advertising were more likely to have positive beliefs about the product or wanted to try that product when they were older.13 Recent research has found that young adult males believed that sports betting was a normal activity, and something that most sports fans would participate in, with some males indicating that this was because of the amount of sports betting marketing within sport.46 We would argue that there is a clear role for governments, policy makers and public health professionals to identify a range of strategies (including regulatory action and education), that seek to normalise the perception that gambling is a ‘normal’ activity, particularly aligned with sport.

Third, this study also demonstrates that processes of observational learning were occurring for some children in this sample, whereby children were learning about the technical aspects of betting via the marketing observed. This was particularly evident from older children who could identify the ways somebody could access sports betting products, and the decisions and processes they would need to make when placing a bet. Most of the recalled betting terminology was from advertising on television or from what children had heard while watching sporting events. Unlike cigarette advertising, which largely avoided the promotion of information about the physical characteristics of the product, gambling advertising links the social aspects of betting with specific technical information about the product. This is a potentially powerful mix, which links the social acceptability of gambling with technology – both of which have strong appeals for children.

Lastly, there were specific promotional strategies used within advertising that reduced children’s perceptions of the risks associated with betting. Perceptions of the harms associated with products have been shown to have a significant impact on young people’s beliefs and intentions to use products.41-42 If advertising creates a perception that betting on sports may not be an activity associated with risk or harm (for children most commonly conceptualised as monetary losses), and in the absence of comprehensive independent mass media campaigns to counter-frame these assertions, it is perhaps not surprising that some children indicate that they would like to try gambling.43 Recent research has also indicated that there is strong community agreement that there should be increased education and messaging for children about the harms associated with gambling products, as well as support for the banning of gambling advertising during children’s viewing hours.1 This is especially important given that international research has found that many of the advertisements for sports betting companies are for complex bets or outcomes that will most likely result in a profit for the betting company.43,44 Researchers and governments should examine the types of harm prevention messages that have the most impact on children’s attitudes towards gambling products, including restricting promotions that may reduce the perception of risks associated with betting, such as inducement and incentive offers.

This study has a number of limitations. First, this was a small convenience sample of children and their parents in one geographical location of Victoria, Australia. While it provides important information that should be tested with much larger samples of children, this study cannot claim to represent the views or experiences of all children. The sample was also significantly skewed towards boys. While it has been assumed that boys are the most ‘at risk’ of transitioning into betting as adults, the seven girls in this study had similar recall and knowledge of betting. This may suggest that the risk factors associated with betting advertising may relate to being a fan of sports where there is significant exposure to promotions. This is an important area for future investigation.

Finally, a recruitment criterion for this study was that children self-reported as being ‘fans’ of the AFL. This self-definition led to a range of children included in the study who had varying levels of engagement with AFL. Further comparative studies of children who are fans of sporting codes that have significant amounts of betting advertising and sponsorship, sporting codes with limited betting advertising and sponsorship, and children who are not fans of sports will be important in further identifying potential risk factors for different sub-groups of children.

**Conclusion**

The effect of sports betting marketing on children is a growing area of research. This study demonstrates children’s engagement with, and recall of, strategies used within sports betting advertisements and the influence betting advertising has on children’s understanding of betting behaviours and terminology. Australia, along with other countries that allow the promotion of gambling, should be exploring evidence-based best practice to reduce the potential harms associated with these promotions for children. Governments should consider changes to regulations, along with evidence-based education campaigns, to counter the positive messages children are exposed to about sports betting, and to ensure children are not being educated about how to gamble through marketing campaigns.
Acknowledgements

We would like to acknowledge Ms Jennifer David for her contribution to the data collection process. We would also like to acknowledge the members of the community who participated in this study.

Funding

ST, HP, and MD receive funding for gambling research from the Australian Research Council and the Victorian Responsible Gambling Foundation. AB receives funding for gambling research from the Victorian Responsible Gambling Foundation. The Victorian Responsible Gambling Foundation is funded via hypothecated taxes from professional athletes. ST receives consultancy funding from the Australian Football League Players Association and AFL Sportsready for gambling harm prevention education for professional athletes.

References

Chapter 10. Discussion and Conclusions

10.1 Chapter overview

This thesis aimed to explore the impact and influence of sports betting advertising on the attitudes, behaviours and gambling consumption intentions of young people. As the main findings have been discussed within each paper, this chapter discusses the key overall findings in relation to the four overall research questions, and specific issues not covered in the discussion sections of each paper. Finally, the chapter summarises the translational outcomes from the thesis.

10.2 Research question one: What do young people recall from the advertising that they see from online bookmakers in different media and community environments?

To date, research exploring young people’s interaction with gambling advertising has explored how young people recall television based advertising [Derevensky et al., 2010; Korn et al., 2005; McMullan et al., 2012; Sklar and Derevensky, 2010]. Very few studies have explored young people’s recall and awareness of brands, the specific advertising strategies associated with these brands, and where they see advertising for sports betting. Research in other areas of public health has indicated that these factors are particularly influential in the consumer socialisation process by developing loyalty to specific brands, and the future consumption of products [Smith and Foxcroft, 2009].

This research contributes to the evidence base by demonstrating that young people aged between 8 to 16 years old, and particularly those who are fans of sport, have very high levels of brand awareness. Children over the age of eight were able to name sports betting brands, recall very detailed aspects of promotions, align brands with advertising strategies, and recall seeing advertising in online and community environments. Of particular importance was the finding that even young children (8 – 11 years old) who were fans of sport had a high level of brand awareness. Research in the areas of tobacco and alcohol has indicated that brand
awareness and recall is the first step in the consumer socialisation process for young people [Anderson et al., 2009; Hanewinkel et al., 2011; Smith and Foxcroft, 2009], and is instrumental in the development of young people’s attitudes towards brands [Baker et al., 1986; Gorn and Florsheim, 1985].

The findings from this research indicate that, whether intentional or not, the advertising strategies used by the sports betting industry are contributing to unprompted recall of brands, young people are interpreting that betting is a positive activity, and that they would like to bet on sports when they are older. This demonstrates the significant impact that exposure to this advertising is having on young people and the development of brand specific attitudes. Further research is important to understand the influence of sports betting advertising and brand strategies, and how this may impact on young people’s gambling behaviours in the future. However, as gambling is a relatively new area of public health it is important to reflect on research, particularly alcohol, which has already explored the impact of young people’s exposure to brand-specific advertising, and the policy recommendations that have emerged from these studies. International studies have concluded that youth exposure to brand-specific advertising is a significant predictor of the consumption of alcohol brands (up to three times more consumption than those not exposed), with significant decreases in exposure needed to reduce the consumption of the most heavily promoted brands [Ross et al., 2014; Ross et al., 2015].

While this research did not specifically seek to examine the relationship between brand recall and awareness and the specific consumption of sports betting brands, the research presented in this thesis provides some important indicators of areas for future research. Along with brand awareness, many young people, a) linked specific promotional appeal strategies with specific sports betting brands, and b) described positive outcomes associated with these brands. This is the first indication that ‘brand capital’ may be developing between young people and some sports betting brands. Saffer [2002] states that companies seek to increase market share by creating ‘personalities’ that appeal to specific target audiences, along with “a set of positive images, emotions, and expectancies that come to be associated with each brand” [Ross et al., 2015, p. 359]. In this thesis, Sportsbet, Bet365, the
TAB, and Ladbrokes were the brands that appeared to be most successful in building brand capital with young people. These brands were not only the most frequently recalled, but were the brands that young people specifically mentioned when describing promotional strategies. The promotions for Sportsbet, the TAB, and Ladbrokes which were reviewed in this thesis also contained a significant number of strategies which could be classified as appealing to children, including humorous content, catchy slogans, and the use of celebrities.

Future research should seek to understand the influence of brand specific advertising on young people’s brand loyalty, including the appeal strategies used within these promotions, where young people are most likely to be exposed to brand specific advertising, and whether this unduly socialises young people to consume the advertised brands. Examples of further research could include studies which investigate the link between specific brand appeals, such as humour and celebrity endorsement, and concepts such as the ‘likeability’ of brands, which when combined, have been demonstrated to have an impact on young people’s intentions to consume brands [Chen et al., 2005].

While this study predominantly explored young people’s interaction with commercial break advertising, it is important to recognise that brand recall and awareness is influenced not only by traditional forms of advertising, but also by more subtle (or below the line) advertising, such as sponsorship. These types of promotions may also have a significant impact on people who would otherwise not be engaged with the product. For example, a study by Hoek and colleagues [1993] found that a single exposure to tobacco sponsorship advertising in young males created more favourable attitudes to smoking among non-smokers, and influenced their brand awareness and brand preference. Future research should seek to understand the role of ‘below the line’ advertising on young people’s brand recall, awareness, and future consumption intentions. Given that sponsorship is often aligned to specific sporting teams, researchers should also investigate whether young people’s emotional ties and loyalty to sporting teams which are sponsored by gambling companies have an amplified impact on awareness of, and loyalty towards, specific brands. This evidence may help public health practitioners to advocate for the removal of gambling sponsorship from sport.
10.3 Research question two: How does sports betting advertising play a role in shaping the gambling attitudes and consumption intentions of young people?

A key aim of this thesis was to understand how sports betting advertising may specifically influence young people’s gambling attitudes and consumption intentions. The findings from this thesis suggest that timing, content and placement of sports betting advertisements interact to initiate an awareness of sports betting, influence attitudes, and impact upon young people’s gambling discourses about sport. While a range of advertising strategies were discussed within each of the papers presented in this thesis, two factors emerged as having a specific influence in shaping young people’s sports betting attitudes and consumption intentions: a) the emotional responses elicited from appeal strategies aligned with sport; and b) the use of promotional strategies which created a reduced perception of the risks associated with gambling.

While the impact of the cultural alignment between gambling and sport on consumer socialisation will be described in more detail in response to research question three, specific appeal strategies from sports betting companies which specifically linked with sporting codes, teams, and matches elicited significant positive emotional responses in young people who were fans of sports. Marketing research has explored how attitudes towards advertisements are influenced by the emotions elicited by specific appeal strategies within advertising [Bagozzi and Moore, 1994; Stayman and Aaker, 1988]. If sports betting is linked to something that children already feel very positively about (such as their favourite sports team or sports star), we should not be surprised that, in the absence of any counter-framing, it will elicit a positive response towards products or brands. However, it is important to note that parents perceived that even when they attempted to highlight the risks associated with sports betting, they were not able to compete with seductive, and saturated marketing strategies from industry.

Researchers have noted that the level of emotional intensity with which individuals respond to advertising may at the same time influence the formation of attitudes
towards that product [Moore et al., 1995]. The studies in this thesis demonstrated that advertising strategies that increased positive emotional responses, such as the use of celebrities and athletes, influenced positive attitudes towards betting. This is not dissimilar to other areas of public health which have demonstrated the influence that exposure to celebrity endorsements can have on children’s attitudes and behaviours [Erdem et al., 2006; Petty, 2006].

This thesis also found preliminary evidence relating to the influential role of promotions that created a reduced perception of the risks associated with gambling. Young people described that these types of promotions, such as cash back offers, also had a significant influence on positively influencing intentions to bet on sport when they were older. The findings relating to risk perceptions are particularly important given that research in other areas of public health, including tobacco, has demonstrated that children with lower perceptions of the risks associated with products are more likely to initiate the consumption of that product [Song et al., 2009].

A number of areas for future research relating to the impact of advertising on young people’s perceptions of the risks associated with gambling emerged from the findings. The first step in such research will be to continue to understand how young people conceptualise the risks and benefits associated with gambling, and whether certain types of promotions may create a sense of reduced risks and enhanced benefits. Furthermore, it will be important to understand how sports betting advertising is promoted within other marketing channels, such as social media sites. This will include the range of appeal strategies used within these promotions, and any additional socialisation impact they may have when embedded within other positive content material such as YouTube channels or games, which may ultimately elicit a positive emotional response in children towards products and brands. Given that advertising for some forms of gambling, such as EGMs, is banned in Australia, research should also investigate whether promotions which reduce young people’s perceptions of the risks associated with sports betting, also contribute to lessened perceptions of risk with other forms of gambling. Research in other areas of public health has shown that the promotions associated with newer iterations of products (which are often promoted as safer or
less harmful) can have an impact on reducing perceptions of risk associated with more harmful products. For example, research that has explored the impact of e-cigarette advertising on risk perceptions has demonstrated that advertising may reduce young people’s perceived harm associated with occasional tobacco smoking [Petrescu et al., 2017]. Future research will be important in understanding how appeal strategies for one form of gambling may positively or negatively influence perceptions about engagements in other forms of gambling. Finally, research should consider how to provide children with information about advertising strategies. Studies have highlighted that understanding why young people form positive attitudes towards harmful products (such as tobacco), is also essential in the creation of social marketing and advocacy campaigns which aim to shift these perceptions [Andrews et al., 2004]. This type of research will be important in developing independent (e.g. not funded or developed by the gambling industry) campaigns that aim to provide comprehensive education for young people about the risks associated with products, and will enhance their ability to interact in a critical way with the advertising that they see for these products.

10.4 Research question three: What is the influence of the alignment between gambling and sport on the gambling attitudes, knowledge and consumption intentions of young people?

The studies presented in this thesis suggest that the alignment of sports betting companies and their promotions with sporting teams and codes, in particular the AFL and NRL, play a significant role in influencing young people’s gambling attitudes and consumption intentions. This alignment is created in a number of different ways, including the direct promotion of sports betting companies within sporting matches and sporting venues, the sponsorship of teams, and the use of athletes as commentators and within promotions. The evidence from this thesis has demonstrated that the alignment between sports betting companies and major sporting codes may be acting as a ‘super peer’, whereby young people are continuously told about the positive aspects of sports betting from online corporate
bookmakers, which is also implicitly or explicitly implied through endorsement from athletes, sporting teams, and codes.

Commercial sponsorship of sports has been described as a ‘powerful tool’ with which to reach consumers and influence them to buy their products. Research suggests that when companies align their product to culturally valued events such as sporting events it creates a perception that the product embodies the values and positive attitudes about the existing event (player or team) [Crompton, 1993]. While significant research in the area of tobacco and alcohol has demonstrated that the alignment between unhealthy products and sport has a powerful positive impact on young people’s attitudes towards and intentions to consume these products [Hoek et al., 1993; Ledwith, 1984; Vaidya et al., 1996], much less research has been conducted in the area of gambling.

Of particular relevance to this thesis is research that has demonstrated the influence promotions during sports can have on those who are involved in sport [Meenaghan, 2001]. Meenaghan [2001] explained that sports fans would be more influenced by advertising and have greater positive brand associations compared to non-sports fans. While this study focused predominantly on young people who self-identified as being fans of the AFL and NRL, the findings demonstrate that young people who were heavily engaged in watching these sports, had high levels of brand awareness and recall of sports betting products, as well as positive intentions to gamble on sport when they were older. In particular, this study demonstrated that for some young people, the language associated with sport had become ‘gamblified’, with odds talk, and discussions specifically related to the technical aspects of betting becoming embedded within young people’s discussions about sport. Research in relation to alcohol has investigated the linkages between alcohol advertising, and how young people form identities relating to alcohol consumption, and how this may influence risk behaviours relating to these products [McCreanor et al., 2005]. Describing alcohol as ‘no ordinary commodity’, researchers have also stressed that repeat exposure to the promotion to alcohol products has both short and long term implications for young people:
“Exposure to repeated high-level promotion inculcates pro-drinking attitudes and increases the likelihood of heavier drinking .... Alcohol advertising predisposes minors to drinking well before legal age of purchase.” [Babor et al., 2003, p. 183]

While this thesis did not aim to understand if sports betting advertising predisposes young people to gambling later in life, the young people in this study who were fans of sport recalled that the repeat exposure to sports betting advertising within sporting events led them to believe that gambling was a normal part of sport, with some expressing pro-gambling attitudes specifically when advertising was aligned to their favourite sporting codes and teams. Adolescents also believed that strategies that aligned the gambling industry with sport (particularly via the involvement of celebrities in promotions) would have an influence on young people.

Are we then seeing the normalisation history that was observed with tobacco and alcohol repeating itself with the alignment of another unhealthy commodity industry with major sporting teams and codes? And is there an additional risk for young people that we did not observe with tobacco and alcohol in that sport is the ‘product’ for sports betting companies?

The findings from this thesis suggests that the normalisation pathway has begun, and that the cultural alignment between the gambling industry and sporting codes plays a clear role in the creation of this pathway. The studies presented in this thesis have demonstrated that the implicit and explicit endorsement of sports betting by athletes, sporting venues, sporting teams, and codes is an influential, and arguably the most influential socialising agent for children who are fans of sports. Ekström [2006] stated that the cultural context in which people are exposed to advertising has a significant impact on the shaping of attitudes and knowledge about products. The embedding of sports betting within an activity that is culturally valued by many young people has a clear influence on their gambling attitudes and behaviours. Young people indicated a desire to try sports betting because they perceived that they were knowledgeable about sports, and that sports betting was a game of skill instead of luck, and because it was promoted by
athletes. While studies have investigated how consumer socialisation may be influenced by role models such as parents or peers, few studies have examined how athletes, with whom young people may have no specific or regular contact, may play a role in modelling sports betting attitudes and consumption intentions [Bush et al., 2004]. This evidence may have important public health advocacy implications in encouraging athletes, sports teams, and sporting codes, to reconsider their relationships with gambling companies.

Importantly, further research should investigate whether this influence extends beyond commercial break advertising, to other more subtle forms of marketing, such as sponsorship and related promotion. Research in tobacco control has demonstrated that sponsorship relationships with sporting teams encouraged positive attitudes of tobacco companies as “good corporate citizens”, and which transferred the positive attitudes and values from sport to tobacco brands [Lavack, 2003, p. 16]. While there has been some research investigating the role of sponsorship on young people’s awareness of sports betting brands [Thomas et al., 2016], researchers should also examine any influence that this may have on attitude formation and consumptions intentions.

10.5 Research question four: What are the range of public health strategies that may be used to respond to the influences of sports betting advertising on young people?

As with tobacco control and alcohol harm reduction strategies, a comprehensive public health approach is needed to address some of the factors influencing young people’s attitudes and consumption intentions. Borrowing language from the National Preventative Health Strategy (2009) [National Preventative Health Taskforce, 2009], what might a roadmap for action look like?

First is the essential role of strong regulatory frameworks which restrict and reduce young people’s exposure to gambling promotions. The evidence in this thesis suggests that young people are exposed to sports betting advertising in multiple spaces, through the consumption of sport on television and at sporting
venues, on social media sites, and within their day to day environments. Further, this exposure appeared to play a role in the development of pro-gambling attitudes for many young people. There are a number of regulatory mechanisms which could be used at state and federal levels to restrict and reduce exposure to sports betting promotions.

1. **Regulations which restrict the timing of sports betting advertising during children’s viewing hours, and during live sport.** Currently, the ACMA codes prohibit gambling advertising during children’s viewing times, however, news, current affairs, sports and sporting programs are exempt from these restrictions [ACMA, 2016]. In May 2017, the Federal government, proposed new regulations that would see gambling advertisements banned from live sports broadcasts from 5 minutes before a live sporting match, until 5 minutes after a live sporting match, up until 8:30pm [Department of Communication and the Arts, 2017b]. Although this is a positive start to combat the amount of advertisements that children are exposed to, there are still concerns that these proposed changes will not go far enough to protect children from being exposed to sports betting advertising. For example, it is unlikely that young people, and especially adolescents, will turn off a live sporting match half way through the game, because the cut off for gambling advertising has ended. Concerns have already been raised about how the sports betting industry may shift their marketing tactics to other channels, for example heavy advertising in pre-game shows, or via increased branding via sponsorship within the game. Given that being a fan of sport and viewing live sport had a significant impact on brand recall, awareness, and the development of brand capital, the complete banning of all forms of gambling promotions within live sport may be a more effective public health response to the impacts of sports betting advertising on young people.

2. **Regulations which restrict sports betting advertising in community environments, including at sporting venues.** As governments focus their regulatory attention towards television advertising, it is important to note that this thesis found that young people could recall sports betting
advertising in a range of different online and land based environments. There have been some efforts to reduce young people’s exposure to sports betting advertising in community environments. In 2016, the Victorian government proposed restrictions to gambling advertising in community environments, such as train stations and schools, referencing the results from this thesis. The Minister for Gaming Marlene Kairouz said “These reforms are an important first step to limit the community’s exposure to betting advertising, especially in places where people spend a lot of time and find hard to avoid” [ABC News, 2016]. In September 2017, the Victorian government introduced the Gambling Advertising Amendment Bill 2017, which would involve the “banning of all betting advertising on roads, public transport, 150 metres from schools” as well as “all static betting advertising, including outdoor billboards, on public transport, roads and associated infrastructure like stations, bridges, noise walls and embankments” [Minister for Consumer Affairs and Gaming and Liquor Regulation, 2017]. These restrictions will hopefully contribute to a reduction in exposure of gambling advertising for Victorian communities.

It is important for other states and territories to consider the amount of advertising for gambling within their communities environments and to ensure that regulatory measures are put in place to reduce this exposure.

However, there have still been very few attempts to restrict or remove sports betting advertising from sporting stadiums. This includes hoardings around grounds, signage on playing surfaces, and logos on player uniforms. Again, given the findings from this thesis relating to brand recall and awareness, this requires urgent regulatory attention. While some sporting codes and stadiums have already made commitments to remove sponsorship logos from jumpers, and to phase out signage from grounds, there has been very limited response from major sporting codes such as the AFL. In the absence of clear regulatory frameworks, public health advocates should aim to provide robust evidence to guide advocacy initiatives aimed at removing sports betting advertising from these environments.
3. Finally, further consideration is needed relating to regulatory frameworks regarding **content within sports betting advertising which may have a specific appeal for young people**. While there are broad restrictions relating to the content of gambling advertisements, there has been very limited consideration relating to strategies within sports betting advertisements that may have a specific appeal to young people. This thesis found that a range of strategies, including the use of celebrities, cartoons, and inducements, appealed to young people. Particularly influential were advertisements which created a reduced perception of risk. While further research is needed to understand the impact of these types of promotions on young people, there is enough information for policy makers to suspend them pending further investigation.

The second part of the ‘roadmap’ related to the **role of education programs and campaigns**. Education and mass media campaigns have been an effective part of a comprehensive approach in many other areas of public health [Frieden, 2010; Wakefield et al., 2010]. Evidence from other areas of public health point to the need for adequately funded, sustained media campaigns, which are run independently of the industry [Wakefield et al., 2010]. While some education initiatives with young people have already been implemented in Australia (predominantly through sporting club programs), it is important that these initiatives should be developed independent of industry, and based on research evidence. The research evidence presented in this thesis suggests that rather than a focus on ‘responsible behaviours’, education programs should be based on critical examinations of the content of marketing, and the expectations versus the realities of gambling products. As the advertising for sports betting becomes increasingly sophisticated, it will be important to continue to engage young people in discussions about their attitudes towards gambling, why they form these attitudes, and factors that may disrupt the normalisation of sports betting for young people. This evidence will also help with tailoring education programs which most appropriately respond to young people’s needs. It is important to note that there is strong community support for education campaigns about gambling, for young people [Thomas et al., 2017]. While public health and health promotion
practitioners should look for opportunities to embed gambling within school curriculum, it may be that sporting clubs and teams also provide an important avenue to directly engage young people who are fans of sport. It is also important to acknowledge that any education campaigns that are implemented are evidence based to ensure that there are no unintended consequences that may arise.

Finally the role of sporting codes and related community organisations in strategies which aim to prevent and reduce young people’s exposure to advertising needs to be addressed. In other areas of public health, such as tobacco there were strong cases for the removal of advertising and sponsorship in sport, predominantly due to the impact on children and the initiation of the onset of smoking. The removal of tobacco from sporting events was not without its challenges and took a long period of advocacy and commitment by public health bodies. However, it is already clear that the alignment of gambling with sports is having an impact on the way young people think about sport. This research provides evidence to support the removal of gambling advertising from sporting broadcasts and events (including at grounds). As a range of stakeholders are involved in the promotion of sports betting advertising it is important that sporting codes, broadcasters and stadiums reconsider their relationships with gambling companies. Sporting teams in Australia have already begun to change their perceptions of gambling, with many Victorian sporting teams signing the Victorian Responsible Gambling Foundation charter [Burgan, 2016]. However the overarching codes still have major relationships and deals with gambling companies [Canning, 2016; Gardner, 2014]. In recent times, individual players have begun to speak out to the media about their concerns about sports betting advertising during AFL and the impact this may be having on children [Baum, 2017], although they are inevitably constrained by commercial and other considerations. Sporting codes should reconsider their relationships with gambling companies, to ensure they are doing their part in reducing children’s exposure to sports betting advertising.
10.6 Thesis impact

The findings from this thesis have contributed extensively to the existing literature in children’s engagement with gambling advertising and the impact on their attitudes and gambling consumption intentions. I have been fortunate throughout my thesis to receive the opportunity to present my research on a number of different media and academic platforms, as well as seeing the translation of my research into direct regulatory action and education campaigns.

10.6.1 Impact of evidence in the media

The findings from my research have been discussed in a number of media outlets including local and national newspaper, radio and television. I have had the opportunity to provide direct comment in some of those articles, while other articles have contained comments from my supervisor Dr. Samantha Thomas about the research, and some articles contained the study findings alone. Examples of the media articles that contained the research findings can be found in Appendix C, and an example of one of the media articles can also be found in Appendix D.

The findings from the thesis have also appeared on platforms that contain widely different audiences, for example, newspaper articles for the Crinkley News, a newspaper targeting primary school aged children which requires content to be relatable and age appropriate; an interview for Radio National (a university student led radio station); comment in a number of local and national media sources (e.g. Geelong Advertiser, Herald Sun, SBS Life); and local radio stations including, ABC South East SA, and RTRFM. In a different context, an overview of the findings from Study Three was presented in an article for a Western Australian science journal. Deakin University Media team have also been very helpful in the dissemination of my research findings. Two media releases on the research studies were developed and appeared via social media sites to promote the research findings. An article called “Gambling on our children’s future” was also published in Deakin Invenio, a monthly newsletter highlighting the research being conducted at Deakin University. Finally, ‘The Today Show’ on the Channel Nine network
discussed some findings from my research on the “Mixed Grill” segment (in which one of the panel members was critical of Channel Nine’s relationship with gambling companies - a screen shot of the segment which was posted to Twitter can be found in Appendix E).

10.6.2 Impact of evidence on governments and policy

The findings from this thesis have been used, in conjunction with additional research from Dr. Samantha Thomas, as evidence to support the restriction of gambling advertisements. The findings from this thesis have been discussed in both national and international parliaments. For example, on the 20th March 2017, Senators Nick Xenophon and Deborah O’Neill highlighted the importance of acknowledging the effect of sports betting advertising on communities in speeches in relation to the Interactive Gambling Amendment Bill 2016 [Commonwealth of Australia, 2017]. The Senators noted evidence from the studies within this thesis that demonstrated children’s awareness of, and exposure to sports betting advertising and the impact sports betting advertising may be having on children’s attitudes towards gambling. The Senators quoted the finding “75 per cent of children aged eight to 16 years believed wagering was a normal or common part of sport” [p. 1450] and Senator O’Neill also noted the finding “90% of children can recall seeing an advertisement for sport betting” [p. 1433].

Thesis findings have also drawn the attention of the Victorian Premier Daniel Andrews, who again quoted “75% of children think sports betting is a normal or common part of sport” on his social media pages (Twitter and Facebook) (Appendix F). This then initiated the announcement of a proposed bill to ban gambling advertising in community spaces in Victoria, such as on public transport, billboards, and 150 meters from schools. As previously discussed, it was announced in September 2017 that this bill will be implemented [Minister for Consumer Affairs and Gaming and Liquor Regulation, 2017].

Internationally, material from this thesis has been cited in the UK House of Lords and the US Supreme Court. On the 15th September 2017, during a balloted debate, Lord Chadlington put forward his concerns surrounding children’s exposure to
gambling advertising. During this discussion Baroness Bloomfield of Hinton Waldrist provided evidence to support the consideration of the amount of gambling advertising during children’s viewing hours, especially during sport [House of Lords Hansard, 2017]. Her viewpoints were supported with evidence from this thesis, in particular that gambling advertising could be influential in children’s attitudes towards gambling, the range of different advertising strategies that children are exposed to, and that gambling advertising may be contributing to the normalisation of gambling.

As the state of New Jersey in the United States of America debates the legalisation of sports betting before the U.S. Supreme Court, an *AMICI CURIAE* was filed on the 23rd of October 2017 [Stop Predatory Gambling et al., 2017] by religious and advocacy groups to oppose the legalisation of sports betting in New Jersey, two of my publications (One and Three) were used as supporting evidence to demonstrate the harms that could eventuate if sports betting was to be made legal in New Jersey.

10.6.3 Impact of evidence on education campaigns

While there is limited education on gambling (and this research is recent), the findings from the thesis have already been used in a Victorian Responsible Gambling Foundation campaign called “Love the Game, Not the Odds” (Appendix G), which aimed to demonstrate the impact exposure to sports betting advertisements were having on children. It included television advertisements, a website, and resources for schools and communities. The campaign was also used to highlight the impact of sports betting advertisements on children. The premise of the campaign was to engage parents and children and provide them with skills to begin talking about sports betting and gambling, the risks involved with gambling and the risk associated with teenage online habits.

10.6.4 Publication impact

The impact of the findings in this thesis can also be measured from an academic perspective. Two of the articles I have published have associated Altmetric figures.
The article published in BMC Public Health (September 2016) has been downloaded 1500 times and has an Altmetric score of 30, while the publication in the Harm Reduction Journal (February 2017) has been accessed 2405 times and has an Altmetric score of 23. According to Google Scholar the publications have been cited 28 time (Table Two).

Table Two: Publication Impact*

<table>
<thead>
<tr>
<th>Publication</th>
<th>Citations</th>
<th>Altmetric Score</th>
<th>Access no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>8</td>
<td>30</td>
<td>1500</td>
</tr>
<tr>
<td>Two</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>Three</td>
<td>16</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Four</td>
<td>4</td>
<td>23</td>
<td>2405</td>
</tr>
<tr>
<td>Five</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Figures as of 05.03.18

10.6.5 Translation of research at conferences

During my candidature I have attended a number of national and international conferences where I have had the opportunity to present the findings of my thesis. The International Congress of Behavioural Medicine conference also published all abstracts that were included in the conference. The conferences I have attended include:

- International Congress of Behavioural Medicine, Melbourne Australia 2016.
- Deakin University, School of Health and Social Development HDR conference, Melbourne Australia 2015-2017.
The following presents the references for the oral and poster presentations I have given throughout my candidature.


10.7 Conclusions

As this is a relatively new field of research there were many gaps within the literature that needs to be explored. Although this thesis was not able to address the entirety of the issues, the work presented in this thesis brings together a body of innovative work that has aimed to increase the very limited knowledge of the influence of sports betting advertising on young people’s attitudes, behaviours, and consumption intentions. The thesis aimed to explore this topic with a specific theoretical lens that identified the influence of socialising agents that may not have been considered in a gambling context; the role of media (in particular advertising) and a culturally valued activity, sport, in the development of young people’s consumer decision making processes. Although this thesis has increased the evidence that supports a range of public health strategies to reduce harm there were a number of areas of future research that emerged from the findings. First, there are still many specific strategies that are needed to be explored to understand the broader effects of sports betting advertising on the development of young people’s positive attitudes and brand preferences. For example, are there strategies such as celebrities, humour, cartoons and voiceovers that are known to appeal to children that may be influential in young people’s attitudes towards specific brands and tendency to want to gambling with that brand in the future? Second, the effects of risk reducing promotions on young people’s conceptualisation and understanding of the risk associated with sports betting, and if these promotions play a role in reducing the perceived risk associated with other gambling products. Third, there needs to be further research to explore how more subtle ‘below the line’ marketing strategies such as sponsorship of sports events or the placement of advertising within online environments is influencing young people’s knowledge about gambling. Lastly, the thesis demonstrates that sports betting advertising is
playing a role in shaping young people’s attitudes about gambling, however further research will be needed to understand how this exposure to sports betting advertising may impact their gambling behaviours as adults.

This research has used the knowledge of other public health efforts such as in addressing alcohol and tobacco, to highlight the possible public health strategies that could be effective in reducing the impact of sports betting advertising on young people. It is important to consider the current impact the findings have had on the political context, with regulatory reforms already proposed by different levels of government in Australia, with interest also developing internationally. Tobacco control, although very successful took approximately 20 years of research and advocacy before substantial action was taken by stakeholders. As legalised sports betting is a relatively new area of public health, it is crucial that governments begin to implement strategies that aim to denormalise gambling in communities, in particular the relationship between sports betting and sport, in order to protect young people and the broader community.

10.8 Chapter summary

This chapter has discussed in further detail the key findings of this thesis in relation to the four research questions. The translational impact of the research findings were then summarised to demonstrate the different ways the research had been presented in different contexts for example media, regulatory, community and academic outcomes. This thesis was concluded with final remarks regarding the overall impact and significance of the research presented.
Chapter 11. References

In addition to the following list of references, further references can be found within each publication.


Australian Institute for Gambling Research. 1999. *Australian gambling comparative history and analysis*. Victoria, Australia: Victorian Casino and Gaming Authority.


harm minimisation, South Australia, Australia, Independent Gambling Authority.


Delfabbro, P., Lahn, J. & Grabosky, P. 2005b. *Adolescent gambling in the ACT*, ACT, Australia, Centre for Gambling Research, ANU.


High Court of Australia 2008. Betfair Pty Limited v Western Australia. 11.


Parliamentary Joint Select Committee on Gambling Reform 2011. Interactive and online gambling and gambling advertising, Interactive Gambling and Broadcasting Amendment (Online Transactions and Other Measures) Bill 2011. ACT, Australia: Parliamentary Joint Select Committee on Gambling Reform.


Pitt, H., Thomas, S. L., Bestman, A., Daube, M. & Derevensky, J. 2017. Factors that influence children’s gambling attitudes and consumption intentions:


Church-Missouri Synod, and Seventeen State Family Policy Councils as AMICI CURIAE in support of respondents.


Appendix A: A review of the literature on gambling advertising and young people (2003-2017)*

<table>
<thead>
<tr>
<th>Sample</th>
<th>Methods</th>
<th>Key advertising related findings</th>
<th>Limitations</th>
<th>Funding sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wiebe, J. &amp; A. Falkowski-Ham. 2003. <em>Understanding the audience: the key to preventing youth gambling problems.</em> Ontario, Canada: Responsible Gambling Council.</td>
<td>In the first phase of this study the Tween report included an existing survey with 20 questions about gambling added. The second was six focus groups in three Canadian cities. The focus groups were approximately 90 minutes. The last phase was a quantitative telephone interview that took approximately 15 minutes to complete. This included questions about gambling behaviours, attitudes and knowledge of gambling, parental gambling, and gambling advertisements. Lastly, the survey asked participants about their</td>
<td>The findings from this study, which focused on advertising, included that the majority of adolescents’ had seen a gambling advertisement, however only 12% had seen a responsible gambling advertisement. Some participants described that the gambling advertisements encouraged gambling, and that gambling was fun, exciting and entertaining.</td>
<td>This study had very limited detail on adolescents’ attitudes towards gambling advertising.</td>
<td>None declared</td>
</tr>
</tbody>
</table>

This study contained 1,072 participants (521 males and 551 females) aged 10-18 years. The participants were from 29 schools, and were relatively similar across grades 6-7, 8-9, 10-11 and grade 12. Participants were asked to complete sections from the Gambling Activities Questionnaire to determine types of gambling engaged in and frequency of use. Preliminary focus groups, were conducted with 47 students to discuss lottery behaviours. A large 140 item questionnaire was developed and 41 items were then used to measure lottery attitudes and behaviours amongst 80 participants. Researchers then conducted the survey again on the same 80 students. Participation occurred during school and took approximately 45-60 minutes to complete. This study found that 74% of participants had gambled in the past 12 months, with 21% who had gambled at least once a week. The results which specifically focused on advertising found that the majority of participants had seen a lottery advertisement on television and just under 40% said they would be more likely to buy a lottery ticket after seeing an advertisement. Self-reported information can lead to bias and the surveys can limit participant’s responses without given the opportunity to explain answers. The paper reported that the study was funded from the Conseil québécois de la recherche sociale (CQRS-FCAR), and that this was part of a grant from the Ministry of Health and Long-Term Care, Ontario.
| The focus groups in this study consisted of 63 participants aged 13-17 years. There were eight different focus groups held in Toronto, Canada. | A content analysis of 479 gambling advertisements, for casinos, horse racing, and lotteries. The content analysis was then used to identify advertisements that would be used in the focus groups. The focus groups asked participants to define gambling, their attitudes towards gambling, and gambling participation. Participants were shown 32 gambling advertisements, and asked their attitudes towards each of the advertisements and what they thought the key themes and messages, target audience and the potential impact the advertisements might have on people. | The content analysis found that the main messages within gambling advertisements were that gambling was fun and exciting, you could win big, a way to escape, a form of entertainment and that anyone could win. The main approaches used in the gambling advertisements were humour, male voice over, colour and anti-establishment or anti-authoritarian attitudes. The results from the focus groups included that participants remembered seeing gambling advertisements on television. Participants also described the advertisements as showing gambling to be fun, entertainment, easy to win, and as though it benefits society. Participants described a wide range of different target audiences, although many thought that the advertisements targeted everyone. Although participants did not | The advertisements used within the focus groups may not be representative of all gambling advertisements. This publication reported their funding from the Ontario Problem Gambling Research Centre. |
necessarily believe that the advertisements were trying to appeal to young people, they did think that it was a reminder of something they could do when they were older. Participant’s attitudes towards gambling did not change significantly after being exposed to the advertisements.


This study included 926 participants, with 473 males, 448 females, and 5 unidentified. The students were aged between 11-19 years (with 39 over 18 years) from 18 schools in the ACT.

This survey included questions relating to the following themes: prevalence and social context of gambling and problem gambling, psychological correlates, statistical knowledge and perception of risk, exposure to gambling advertising, and help seeking tendencies.

This study found 70.4% of participants had gambled in the past 12 months, with males more likely to gamble frequently than females. Gambling participation was higher among participants in older school years. Poker, blackjack and sports betting were considered to be the gambling products that required the most skill.

The results that specifically looked into young people and their exposure to gambling advertising found that most participants remembered seeing a gambling advertisement in the past week, and participants who

This study involved self-reported data, which can be difficult to identify bias, especially in young people. The use of surveys also limits the amount of detail and potential for further inquiry compared to qualitative data.

None declared
were classified as problem gamblers were more likely to remember advertisements. Lottery advertisements were the most recalled gambling advertisement that participants had seen in the past week. Although some participants could recall specific brand names from the advertisements, many couldn’t remember that detail.


| This study included 1, 147 participants, with 575 males and 572 females. The participants were aged 12-19 years, (n=220 12-14 years; n=502 14-16 years; n= 425 17-19 years), from eight schools in Canada. | The Gambling Activities Questionnaire, the DSM-IV-MR-J and the Effects of Gambling Advertising Questionnaire were all administered to students at school and was completed in approximately 20-30 minutes. | The results specifically about advertising found that males had more positive attitudes towards gambling advertisements, and females had more negative attitudes towards gambling advertising. Older adolescents, and those who registered as a problem gambler also had greater positive attitudes towards gambling advertising compared to other adolescents. Of the participants in this study, 96% had seen a gambling advertisement and 55% of participants in grade 11-12 agreed | This survey contained self-reported data, which may increase bias. | None declared |
that gambling advertising had made them want to try gambling.


This study included 127 advertisements for lottery tickets and scratch cards. Advertisements included print, video, and radio. The advertisements were analysed to identify key features that may appeal to children. This included the people within advertisements, humour, winning, social status, and popular culture.

This study identified nine key themes within the lottery advertisements: easy money, dream, social status, glamour, regular folks, sports, excitement, humour, and youth culture [p. 540].

Advertisements were sourced from lottery companies, which may have skewed the sample. The themes identified were also not tested on young people. This may be an area of research.


This sample included 50 participants aged 13-18 years. This included 24 males and 26 females. This study included six focus groups with three age groups: 13-14, 15-16, 17-18. This study aimed to include a number of tasks to engage participants. This included This study found that all participants could remember gambling advertisements, with over 70% recalling one in the past week. Participants thought that there were a range of strategies within gambling advertisements that promoted gambling, with 90% of females

This study used self-reported data and did not collect information on participant’s actual gambling behaviours. None declared.
An initial questionnaire, 16 gambling advertisements were shown to participants. This was then used to prompt discussion around their likes, dislikes, key messages, appeals and the targets of the advertisements. Believing that gambling advertisements suggested gambling was normal.

Qualitative results explored the design of advertisements in more detail. Participants discussed aspects that they liked or did not like about the range of advertisements. Most commonly this included the use of colour, the language used, simplicity of the advertisement, and winning.


This sample included 131 participants (49% male and 50% female) living in Queensland, Australia, aged 12-17 years. An online panel survey company was used to administer the survey. Surveys were conducted after the completion of the AFL and NRL sporting seasons. The survey took approximately 15-20 minutes to complete. The survey included questions relating to sports viewing, gambling advertising and company recall, and attitudes towards gambling.

This study found that participants most frequently watched NRL and AFL. Over 40% of participants recalled a gambling brand, with most recalling a sports betting brand. The study found that most adolescents had negative views about gambling advertising during sport.

When asked about the effect of gambling advertising, adolescents believed that gambling advertising wouldn’t affect their own desires to gamble, but they did agree that online panel companies can result in bias. The sample was only from one state which may affect the generalisability of the results, given the different gambling environments in each Australian state.

This study reported that it was funded by a Responsible Gambling Research Grant from the Queensland Department of Justice and Attorney General.
There were then more specific questions relating to attitudes towards sports betting advertising, promotions and the influence of advertising on participant’s future use. Gambling advertisements could encourage young people to gamble, increase current gamblers to increase their gambling, and could increase gambling problems. In relation to gambling promotions, adolescents did not agree with the use of a range of promotional strategies used by gambling companies such as celebrity endorsements. However, some adolescents were influenced by novelty gambling promotions, odds talk and advertising around the ground. Many young people did not indicate a desire to gamble as adults. Although statistical analysis found a correlation between intentions to gamble and exposure to gambling advertisements.


| This sample included 59 family groups from Victoria, Australia. Participants included 61 adolescents (33 male and 28 female) and a parent. Adolescents | A short survey was initially administered by researchers to participants, which covered basic demographic data, perceptions of the people who gamble and who develop problems with gambling. | This study found that some adolescents had positive attitudes towards gambling advertisements. Adolescents described wanting to go to the casino when they were older because of the advertisements they had seen. Adolescents also perceived | This study contained a small sample, with limited cultural diversity, and families who | This study reported funding for this study from the Victorian Responsible Gambling Foundation. |
were aged between 14 and 18 years old. An online recruitment company was used to identify families based on SEIFA scores.

The second phase of the interview, showed five gambling advertisements to parents and adolescents as a way of stimulating discussion about gambling advertising strategies, impact of advertising and the gambling industry’s relationship with sport.

There were concerns from participants that gambling advertising may be having a normalising effect. As parents discussed seeing a change in the language their children used while talking about sport. Both parents and adolescents expressed concern with the presence and amount of gambling advertising during sport. However some adolescents thought gambling advertisements made gambling seem fun, exciting, and easy.


This sample included 85 young people aged 5-12 years, in NSW.

This study found that over 75% of young people identified at least one correct sponsorship relationship. Older children (9-12 years) were able to correctly identify shirt sponsors more so than younger.

The study only included one gambling sponsor. There was only 50% of participants.

None declared
people to place magnets of junk food, alcohol, gambling and control brands on a whiteboard next to professional AFL and NRL team logos. Young people were asked to select two brands they liked the most. Young people were also asked about their sports viewing, ownership of sporting team merchandise, and favourite team.

children. Just under 20% of young people selected an alcohol or gambling product as their favourite brand.

who had watched NRL over the past week, it would have strengthened the study if there was a higher sample of young people who were involved in the NRL.


<table>
<thead>
<tr>
<th>The qualitative interviews included adolescent males 13-17 years</th>
<th>This report included four key studies: a literature review, environmental scan of advertising, focus groups with different sub populations, including adolescents aged 13-17 years, and an online survey including adolescents aged 13-17 years.</th>
<th>The following results are from those studies that included adolescents. The findings from the focus groups included that adolescents could remember seeing advertising for sports betting, with some adolescents believing that advertising was contributing to the normalisation of gambling. Some adolescents described advertisements as demonstrating gambling as being accessible and fun.</th>
<th>A limitation of this report was the presentation of the focus group results, as it was hard to distinguish what all adolescents believed as only a selection of quotes were provided.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The online survey included 3200 participants from six different groups, with 519 adolescents. This included 122 males and</td>
<td>In the focus groups</td>
<td>who had watched NRL over the past week, it would have strengthened the study if there was a higher sample of young people who were involved in the NRL.</td>
<td>This publication reported the funding for this research from Gambling Research Australia.</td>
</tr>
</tbody>
</table>
participants were shown eight traditional and non-traditional horse and sports betting advertisements. They then discussed these advertisements in terms of the amount of advertisements they had seen, the impact on attitudes towards gambling, the target audience and key messages.

The online survey included questions relating to gambling behaviour, sports viewing, awareness of betting companies, exposure to and attitudes towards sports betting marketing, effectiveness of responsible gambling messages, and impact of sports betting marketing on gambling.

Adolescents were also concerned about young people’s exposure to sports betting advertising, with some adolescents believing that sports betting companies were trying to encourage young people to be “future consumers”.

The results from the online survey found that adolescents had been exposed to sports betting marketing, most commonly on television. Adolescents perceived that sports betting advertisements showed that people could win and could make you wealthy. These beliefs were more common in adolescents than any other group within the survey. This survey found that exposure to sports betting advertising was linked with a tendency to agree with statements.

Some young people indicated that sports betting advertising influenced their desire to try betting. Although the majority of adolescents did not

Females were also not included in the focus groups and it was based in Sydney, which may have impacted the generalisability of the study.
have a favorite betting brand; TAB, Sportsbet and Tom Waterhouse were selected the most. Finally, responsible gambling messages were not recalled by as many adolescents compared to other groups.

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>This study included 304 participants (152 parents, 152 children). Children were aged 8-16 years.</td>
</tr>
<tr>
<td>This study used a whiteboard and magnets to understand children and parents implicit gambling sponsorship relationships of the NRL and AFL. This activity was accompanied with a short qualitative survey that explored children’s sports betting brand recall, and attitudes towards sports betting advertising.</td>
</tr>
<tr>
<td>This study found that over 75% of children could name at least one sports betting brand, with over 25% of children naming four or more brands. Just under 25% of children (23%) correctly identified the Crown Resorts and South Sydney Rabbitohs (NRL team) jersey sponsorship relationship. The qualitative responses found that parents and children were concerned about the amount of advertising within sport. They recommended that sporting codes should take responsibility for the sponsorship relationships and advertising that occurs within sporting broadcasts.</td>
</tr>
<tr>
<td>This study sample was predominantly people from NSW and who were recruited from NRL sites. It would be interesting to understand the difference between children from different areas and who are exposed to different levels of advertising.</td>
</tr>
<tr>
<td>This study reported funding for this study from the Victorian Responsible Gambling Foundation.</td>
</tr>
</tbody>
</table>

*Does not include the publications presented in this thesis*
Appendix B: Publication License

JOHN WILEY AND SONS LICENSE
TERMS AND CONDITIONS

This Agreement between Ms. Hannah Pitt ("You") and John Wiley and Sons ("John Wiley and Sons") consists of your license details and the terms and conditions provided by John Wiley and Sons and Copyright Clearance Center.

License Number 4303270184552
License date Mar 06, 2018
Licensed Content Publisher John Wiley and Sons
Licensed Content Publication HEALTH PROMOTION JOURNAL OF AUSTRALIA
Licensed Content Title Do betting advertisements contain attention strategies that may appeal to children? An interpretative content analysis
Licensed Content Author Hannah Pitt, Samantha L. Thomas, Amy Bestman, Melanie Randle, Mike Daube
Licensed Content Date Jan 3, 2018
Licensed Content Pages 1
Type of use Dissertation/Thesis
Requestor type Author of this Wiley article
Format Print and electronic
Portion Full article
Will you be translating? No
Title of your thesis / dissertation Sports betting advertising: Shaping children’s gambling attitudes and consumption intentions.
Expected completion date Mar 2018
Expected size (number of pages) 229
Requestor Location Ms. Hannah Pitt
221 Burwood Hwy
Burwood, Victoria 3125
Australia
Attn: Ms. Hannah Pitt
Publisher Tax ID EU826007151
Total 0.00 AUD

Terms and Conditions
TERMS AND CONDITIONS
This copyrighted material is owned by or exclusively licensed to John Wiley & Sons, Inc. or one of its group companies (each a "Wiley Company") or handled on behalf of a society with which a Wiley Company has exclusive publishing rights in relation to a particular work (collectively "WILEY"). By clicking "accept" in connection with completing this licensing transaction, you agree that the following terms and conditions apply to this transaction (along with the billing and payment terms and conditions established by the Copyright Clearance Center Inc., ("CCC's Billing and Payment terms and conditions"), at the time that you opened your RightsLink account (these are available at any time at http://myaccount.copyright.com).

Terms and Conditions

- The materials you have requested permission to reproduce or reuse (the "Wiley Materials") are protected by copyright.

- You are hereby granted a personal, non-exclusive, non-sub licensable (on a stand-alone basis), non-transferable, worldwide, limited license to reproduce the Wiley Materials for the purpose specified in the licensing process. This license, and any CONTENT (PDF or image file) purchased as part of your order, is for a one-time use only and limited to any maximum distribution number specified in the license. The first instance of republication or reuse granted by this license must be completed within two years of the date of the grant of this license (although copies prepared before the end date may be distributed thereafter). The Wiley Materials shall not be used in any other manner or for any other purpose, beyond what is granted in the license. Permission is granted subject to an appropriate acknowledgement given to the author, title of the material/book/journal and the publisher. You shall also duplicate the copyright notice that appears in the Wiley publication in your use of the Wiley Material. Permission is also granted on the understanding that nowhere in the text is a previously published source acknowledged for all or part of this Wiley Material. Any third party content is expressly excluded from this permission.

- With respect to the Wiley Materials, all rights are reserved. Except as expressly granted by the terms of the license, no part of the Wiley Materials may be copied, modified, adapted (except for minor reformatting required by the new Publication), translated, reproduced, transferred or distributed, in any form or by any means, and no derivative works may be made based on the Wiley Materials without the prior permission of the respective copyright owner. For STM Signatory Publishers clearing permission under the terms of the STM Permissions Guidelines only, the terms of the license are extended to include subsequent editions and for editions in other languages, provided such editions are for the work as a whole in situ and does not involve the separate exploitation of the permitted figures or extracts. You may not alter, remove or suppress in any manner any copyright, trademark or other notices displayed by the Wiley Materials. You may not license, rent, sell, loan, lease, pledge, offer as security, transfer or assign the Wiley...
Materials on a stand-alone basis, or any of the rights granted to you hereunder to any other person.

- The Wiley Materials and all of the intellectual property rights therein shall at all times remain the exclusive property of John Wiley & Sons Inc, the Wiley Companies, or their respective licensors, and your interest therein is only that of having possession of and the right to reproduce the Wiley Materials pursuant to Section 2 herein during the continuance of this Agreement. You agree that you own no right, title or interest in or to the Wiley Materials or any of the intellectual property rights therein. You shall have no rights hereunder other than the license as provided for above in Section 2. No right, license or interest to any trademark, trade name, service mark or other branding ("Marks") of WILEY or its licensors is granted hereunder, and you agree that you shall not assert any such right, license or interest with respect thereto.

- NEITHER WILEY NOR ITS LICENSORS MAKES ANY WARRANTY OR REPRESENTATION OF ANY KIND TO YOU OR ANY THIRD PARTY, EXPRESS, IMPLIED OR STATUTORY, WITH RESPECT TO THE MATERIALS OR THE ACCURACY OF ANY INFORMATION CONTAINED IN THE MATERIALS, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY, ACCURACY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, USABILITY, INTEGRATION OR NON-INFRINGEMENT AND ALL SUCH WARRANTIES ARE HEREBY EXCLUDED BY WILEY AND ITS LICENSORS AND WAIVED BY YOU.

- WILEY shall have the right to terminate this Agreement immediately upon breach of this Agreement by you.

- You shall indemnify, defend and hold harmless WILEY, its Licensors and their respective directors, officers, agents and employees, from and against any actual or threatened claims, demands, causes of action or proceedings arising from any breach of this Agreement by you.

- IN NO EVENT SHALL WILEY OR ITS LICENSORS BE LIABLE TO YOU OR ANY OTHER PARTY OR ANY OTHER PERSON OR ENTITY FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY OR PUNITIVE DAMAGES, HOWEVER CAUSED, ARISING OUT OF OR IN CONNECTION WITH THE DOWNLOADING, PROVISIONING, VIEWING OR USE OF THE MATERIALS REGARDLESS OF THE FORM OF ACTION, WHETHER FOR BREACH OF CONTRACT, BREACH OF WARRANTY, TORT, NEGLIGENCE, INFRINGEMENT OR OTHERWISE (INCLUDING, WITHOUT LIMITATION, DAMAGES BASED ON LOSS OF PROFITS, DATA, FILES, USE, BUSINESS OPPORTUNITY OR CLAIMS OF THIRD PARTIES), AND WHETHER OR NOT THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY PROVIDED HEREIN.
• Should any provision of this Agreement be held by a court of competent jurisdiction to be illegal, invalid, or unenforceable, that provision shall be deemed amended to achieve as nearly as possible the same economic effect as the original provision, and the legality, validity and enforceability of the remaining provisions of this Agreement shall not be affected or impaired thereby.

• The failure of either party to enforce any term or condition of this Agreement shall not constitute a waiver of either party's right to enforce each and every term and condition of this Agreement. No breach under this agreement shall be deemed waived or excused by either party unless such waiver or consent is in writing signed by the party granting such waiver or consent. The waiver by or consent of a party to a breach of any provision of this Agreement shall not operate or be construed as a waiver of or consent to any other or subsequent breach by such other party.

• This Agreement may not be assigned (including by operation of law or otherwise) by you without WILEY's prior written consent.

• Any fee required for this permission shall be non-refundable after thirty (30) days from receipt by the CCC.

• These terms and conditions together with CCC's Billing and Payment terms and conditions (which are incorporated herein) form the entire agreement between you and WILEY concerning this licensing transaction and (in the absence of fraud) supersedes all prior agreements and representations of the parties, oral or written. This Agreement may not be amended except in writing signed by both parties. This Agreement shall be binding upon and inure to the benefit of the parties' successors, legal representatives, and authorized assigns.

• In the event of any conflict between your obligations established by these terms and conditions and those established by CCC's Billing and Payment terms and conditions, these terms and conditions shall prevail.

• WILEY expressly reserves all rights not specifically granted in the combination of (i) the license details provided by you and accepted in the course of this licensing transaction, (ii) these terms and conditions and (iii) CCC's Billing and Payment terms and conditions.

• This Agreement will be void if the Type of Use, Format, Circulation, or Requestor Type was misrepresented during the licensing process.

• This Agreement shall be governed by and construed in accordance with the laws of the State of New York, USA, without regards to such state's conflict of law rules. Any legal action, suit or proceeding arising out of or relating to these Terms and Conditions or the breach thereof shall be instituted in a court of competent jurisdiction in New York County in the State of New York in the United States of America and each party hereby consents and submits to the personal jurisdiction of such court, waives any objection to venue in such court and consents to service of process by registered or certified mail, return receipt requested, at the last known address of such party.

**WILEY OPEN ACCESS TERMS AND CONDITIONS**
Wiley Publishes Open Access Articles in fully Open Access Journals and in Subscription journals offering Online Open. Although most of the fully Open Access journals publish open access articles under the terms of the Creative Commons Attribution (CC BY) License only, the subscription journals and a few of the Open Access Journals offer a choice of Creative Commons Licenses. The license type is clearly identified on the article.

**The Creative Commons Attribution License**
The Creative Commons Attribution License (CC-BY) allows users to copy, distribute and transmit an article, adapt the article and make commercial use of the article. The CC-BY license permits commercial and non-

**Creative Commons Attribution Non-Commercial License**
The Creative Commons Attribution Non-Commercial (CC-BY-NC) License permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes. (see below)

**Creative Commons Attribution-Non-Commercial-NoDerivs License**
The Creative Commons Attribution Non-Commercial-NoDerivs License (CC-BY-NC-ND) permits use, distribution and reproduction in any medium, provided the original work is properly cited, is not used for commercial purposes and no modifications or adaptations are made. (see below)

**Use by commercial "for-profit" organizations**
Use of Wiley Open Access articles for commercial, promotional, or marketing purposes requires further explicit permission from Wiley and will be subject to a fee. Further details can be found on Wiley Online Library
http://olabout.wiley.com/WileyCDA/Section/id-410895.html

**Other Terms and Conditions:**

v1.10 Last updated September 2015

Questions? customercare@copyright.com or +1-855-239-3415 (toll free in the US) or +1-978-646-2777.
Appendix C: A sample of research findings in the media

<table>
<thead>
<tr>
<th>Media article references</th>
</tr>
</thead>
</table>


editorial/odds-are-sports-betting-ads-are-a-bad-gamble-20161023-gs8kmm.html [Accessed 20.11.17].


Appendix D: Newspaper article

Kids as young as eight are at risk of developing gambling problems

Almost half of Australian children have gambled according to new research. So what can parents do to prevent this?

By Megan Blandford

A new study has highlighted that 40 per cent of kids have already gambled.

In the research, 48 sports-fan children aged eight to 16 were interviewed about their gambling beliefs. They described gambling as “fun”, “easy”, and an activity where “everyone wins”. They were able to talk about different betting options, and showed a keen interest in gambling in the future.

“Kids are getting these ideas from the advertising,” says Hannah Pitt, Deakin University researcher and the study’s author. “They’re hearing people saying ‘bet now’ and ‘just click this’ and they pick up on the positive messages they’re getting.

“These kids are watching a game a week or more of their favourite sport, and they’re seeing sports betting advertised within something they love,” Pitt says. “They’re hearing really sports-specific promotions such as, ‘if your team is winning at half time but loses you can get your money back’ and they start to think this is something they might want to take part in because they know about it.”
Children aren’t targets, but they’re vulnerable

While gambling ads aren’t targeted at children, kids are major consumers of these messages.

“The ads themselves are not specifically targeting children,” says Pitt, “but there are a range of factors in them that are really appealing to kids: they might be funny ads or using celebrities, fun characters and sports stars. It gets the kids’ attention.”

Research tells us that for every AFL match a child watches on television, they’re exposed to 50 gambling messages; this increases to 58 if they’re attending the game. These messages are almost always positive towards the idea of gambling.

This all adds up to normalise gambling in kids’ minds: research shows that with this high exposure, it becomes an acceptable activity that is generally viewed as exciting and harmless.

They described gambling as “fun”, “easy”, and an activity where “everyone wins.”

Gambling, though, is far from harmless. During the 2013-2014 football season it was estimated Australians lost $626 million, an increase of 25 per cent from the previous year. According to Lifeline, problem gambling can result in mental illness, debt, relationship problems and other negative effects on families, and job loss.

When our kids are exposed to gambling they become open to those same risks.

“When sports gambling is aligned with culturally valued events, the risks associated with kids are very similar to adults,” says Pitt. “Some kids might have just bet on the Melbourne Cup (maybe just in a sweep), which has traditionally been seen as an innocent form of gambling. But later, when they’re on the cusp of gambling age, it makes it easier for a transition to adult gambling to occur.”

One way to avoid normalising gambling is to set the example to your children by not gambling yourself.

This is not an insular problem; it’s also common for kids in Canada, the US, the UK and Norway to gamble, and gambling rates are much higher among Indigenous Australians than in the wider Australian population.

“It’s a community problem, so there are community solutions,” says Pitt. “Governments need to step up and close the loopholes in advertising regulations. Sporting codes – who make money through sponsorship and advertising deals – and broadcasters also need to protect their vulnerable sports fans.”

What can we do as parents?

There are a couple of ways you can start to counteract these messages within your own family:

- Be a good role model. “75 per cent of kids think gambling is a normal part of sport,” says Pitt. One way to avoid normalising gambling is to set the example to your children by not gambling yourself.

- Talk about it. “Be aware that your kids are being exposed (to gambling ads), so start the conversation with them,” Pitt suggests. “Ask them how much they know about it, and discuss the risks associated with gambling.”
Appendix E: The Today Show “Mixed Grill” segment

https://twitter.com/TheTodayShow/status/764956594937274368

**The Today Show**
@TheTodayShow

Investigations reveal 75% of older children think betting is a normal part of sport. Should we ban gambling? **#9Today**
Appendix F: Victorian Premier Facebook post

Appendix G: Victorian Responsible Gambling Foundation
‘Love the Game Not the Odds’


Gambling advertising is changing the way our kids see sport.

The amount of gambling advertising our kids are being exposed to on a daily basis would make it seem like gambling is now just a normal part of sport.

By making it seem normal, we don’t consider the risks in the same way we have in the past. And young people don’t always realise the difference between ads and reality, seeing betting as a quick, easy way to make money.

Gambling is seen as a normal part of sport, but it doesn’t have to be.
Appendix H: Human Research Ethics Training

Hi HANNAH PITT (hpitt),
Congratulations, you have successfully passed the Human Research Ethics Training module.

Please retain this email and submit a copy along with your first ethics application to either DUHREC or your Faculty HEAG.

It is your responsibility to ensure that this documentation is supplied of evidence of your successful completion of the training.

You should ensure that you remain familiar with the current ethics guidelines, policies and procedures in order to meet your ethics obligations.

Deakin Research Integrity.
research-ethics@deakin.edu.au
Appendix I: Research Integrity Training

From: clouddeakin-noreply@deakin.edu.au
To: HANNAH PITT
Cc: Deakin Research Integrity
Subject: Research Integrity Online Training Quiz
Date: Wednesday, 6 July 2016 8:06:49 PM

Hi HANNAH PITT (hpitt),

Congratulations, you have successfully passed the Research Integrity online training module.

Please retain this email for your records.

Deakin Research Integrity
research-integrity@deakin.edu.au