Gambling among university sport students: a preliminary analysis

Carwyn Rh. Jones^{1,*}, Harry C. R. Bowles², Daisie Mayes¹, Heidi Smith¹

- ¹ School of Sport and Health Sciences, Cardiff Metropolitan University, Cardiff, UK
- ² Department for Health, University of Bath, Bath, UK
- * Corresponding author: crjones@cardiffmet.ac.uk

ABSTRACT

The aim of this study was to explore risks associated with the gambling habits and attitudes of sport students governed by betting integrity rules. Using focus groups with male and female student rugby and football players, we identified four areas of concern. First, participants considered gambling as a 'normal' pastime — a largely harmless form of communal entertainment. Second, we found that participants' gambling behaviour was influenced by marketing strategies and by peers. Third, although participants were aware of some of the potential risks of gambling, they had a limited understanding of how problem gambling and addiction might develop. Taken together, we believe these encourage gambling and increase risks of gambling related problems. The fourth concern relates to breaking integrity rules. Although we found no evidence of intentional corrupt behaviour, participants had a casual attitude towards gambling regulations, and some broke the betting rules in ways they deemed trivial. Moreover, participants did not seem to take anti-corruption education/intervention particularly seriously.

KEYWORDS

gambling; student-athletes; attitudes; risk; integrity; harm

DOI

10.14712/23366052.2022.6

^{© 2022} The Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

INTRODUCTION

In Great Britain (GB), a recent Gambling Commission (2019) survey found that 46% of the 4009 respondents aged 16 and over had gambled in the last 4 weeks, with 52% of gamblers gambling at least once per week. Rapid expansion of the gambling industry in the UK since the 2005 Gambling Act, coupled with advancements in technology, has made gambling increasingly accessible, much simpler, and less stigmatized (Orford, 2010). Growth in gambling opportunity and behaviour has fuelled a growth in gambling problems including gambling disorder or addiction (Orford, 2020). Each problem gambler is said to effect between 10 and 17 other people highlighting gambling's potential to not only cause, but to extend harm within communities and among gamblers' social networks (Orford, 2010). Harms include debt, crime, job losses, relationship breakdown, anxiety, depression, alcohol and substance misuse and suicide (Abbot et al., 2013). It is unsurprising, therefore, that gambling in the UK and internationally has become a major public health concern.

Despite its risks and associated harms, gambling continues to be heavily promoted and endorsed within liberalised gambling jurisdictions. In the UK, the 'gambling establishment' – a powerful alliance of interests – works to encourage and normalise gambling in a variety of ways (Orford, 2020). The gambling establishment includes the gambling industry (the companies which supply products), but also governments whose policies have enabled expansion through de-regulation, and non-government organisations such as football and rugby clubs (and governing bodies and league and cup competitions) who play a role in promoting gambling.

According to Cassidy (2020), the gambling establishment perpetuate an entrenched way of thinking, talking, and acting positively in relation to gambling through a series of discursive strategies designed to shape collective and individual gambling attitudes and behaviours. Orford (2020) presents five 'types' of discourse which contribute to the normalisation of gambling.¹ Three are particularly pertinent in the way that they frame individual behaviour, namely the 'harmless entertainment', the 'freedom to choose' and the 'personal responsibility' discourses. Collectively, these narratives work to minimise the perception of risk and promote a particular conception of problem gambling that removes responsibility from the product and places squarely at the feat of a minority of individuals who, for some reason, are unable to exercise restraint (Cassidy, 2020). Space does not permit a detailed discussion on gambling disorder, but suffice to say there are number of contributing factors about the individual, the type and availability of gambling options, the gambling setting and the prevailing gambling culture that lead people towards establishing harmful gambling practices (Flanagan, 2011; Schüll, 2014).

Marketing plays a crucial role in delivering establishment messages frequently and powerfully to the population, young and old (Jones et al., 2019). Recently, concerns about the impact of gambling marketing in general (Binde, 2009; Derevensky et al., 2010), and through sport in particular (Hing et al., 2013; Jones et al., 2019; Jones,

The five discourses discussed by Orford (2020, 44) are the 'harmless entertainment', the 'ordinary business', the 'social and cultural benefits', the 'freedom to choose' and the 'personal responsibility' discourses.

2015), have been raised. Betting on sport and on football in particular has grown significantly in recent years (Sharman, 2020) and is a key component of the gambling industries expansion in Great Britain (Lim et al., 2017). Gambling promotion and marketing have become 'part of the furniture' of consuming sport and fandom internationally (Lamont and Hing, 2020; Thomas et al., 2012a), with research indicating that marketing strategies utilised by the sports betting industry are specifically designed to target young males (Deans et al., 2016b; Lopez-Gonzalez et al., 2017).

Consequently, young men with an interest and/or involvement in sport are increasingly incentivised to gamble (Thomas et al., 2012b), with watching and betting on sport acting as a potential gateway to gambling related harms for this group (McGee, 2020). Hing et al. (2016) found that in Australia, men betting on sport who are young, single, educated, employed or full-time students were particularly vulnerable to highrisk gambling because of their exposure to sports betting marketing among other factors such as family/friend influences. Watching televised sport is associated with greater intention to gamble, and whilst men tend to watch more sport than females, women who watch sport also display greater intention to gamble (Hing et al., 2013). Advertising through mainstream and social media channels has also been shown to act as an external barrier to changing problem gamblers' beliefs about the balance of knowledge and skill versus chance inherent to sports betting products (Lopez-Gonzalez et al., 2020). Specifically, Lopez-Gonzalez et al. (2020) findings revealed the manner 'winners' are promoted and portrayed in marketing reinforce problem gamblers' perceptions about the value of knowledge and skill, and how certain approaches to betting can lead to greater success (profit).

Accompanying the rise and popularity of sport betting and the unabashed marketing regime of the sports betting industry, is the evolution and subsequent exploitation of technology. Indeed, developments in technology have played an important role in the growth of the gambling industry which has sought to maximise profit through creative and technologically sophisticated ways to entice and sustain game play and encourage extended bouts or binges (Schüll, 2014). Increasingly, gambling takes place online through mobile technology enabling 'round the clock' access to a variety of gambling related products and markets (Deans et al., 2016a; Gambling Commission, 2019; Griffiths et al., 2011; Killick & Griffithjs, 2020).

The convenience and constant presence of online sports gambling present additional risks to other forms of land-based gambling such as bingo or horse racing, and is arguably riskier (Cassidy, 2020). For example, research has shown online betting is characterised by a lack of restrictions on the ability to place immediate bets and the opportunity to chase losses (Lopez-Gonzalez et al., 2017). For the young men in McGee's (2020) study, the 'facelessness' of online betting was a significant risk factor as it enabled gambling without interaction with other people who may have otherwise criticised or judged their gambling behaviour. Similarly, Killick and Griffiths (2020) noted online sports betting using smartphones provided a solitary gambling environment absent of guilt, stigma, and feelings of judgement in a sample of young male and female gamblers. Their findings also suggest gambling via a smartphone allows immediate access to gambling, ease of access to in-play betting and facilitated gambling unhindered by interruption. Young people are thought to be particularly vulnerable to the risks of online gambling (King et al., 2010) due, in part, to young people's proficiency and

familiarity with multi-media (Griffiths & Parke, 2009) and the ubiquitous presence of mobile technology in young people's lives (Conlin & Sillence, 2021).

Allied to the socialising effects of the gambling industry's products and profile-raising tactics, a consistent finding across the gambling literature is the direct and indirect influence of peers, friends and family members on the gambling of young adults (Abbot et al., 2013; Deans et al., 2017b; Hing et al., 2016). Gambling with others often leads to gambling more than if alone (Abbot et al., 2013) and regularly begins as a social activity before turning into more compulsive behaviour (Killick & Griffiths, 2020). Within friendship, peer or team groups, betting and discussing 'odds' become part of the everyday narrative (McGee 2020, Hing et al., 2016; Pitt et al., 2016) and can generate social pressure to gamble (Deans et al., 2017a). This link between peer influences and gambling activity often manifests as a form of subcultural identity (Iwamoto & Smiler, 2013). Gordon et al. (2015) describe a 'consumption community' among peers in relation to sport gambling. In other words, specific friendship groups or teams might be characterised by a gambling ethos that normalises, values and rewards certain betting habits.

The existence of a gambling ethos among specific sub-groups is further supported by research into the gambling culture of professional sports teams. Lim et al. (2017) highlight gambling as a salient feature of life as a professional footballer in the UK. Their qualitative insights from male professional footballers who had received, or were receiving, treatment for gambling disorder reveal a gambling rich environment characterised by regular group outings to casinos and racecourses, 'card schools', the intensive sharing of tips among teammates and other colleagues, and a strong perception that engaging with gambling activities was good for 'team spirit'. Combined, these factors worked to normalise heavy betting practices and acculturate young professionals into the authentic lifestyle of professional football. Furthermore, Vinberg et al. (2021) suggest determinants for gambling in elite sport comprise a variety of individual factors such as thrill seeking, and factors specific to the workplace setting of sport where gambling was seen as another type of performance to be deemed good at and a way of filling large amounts of spare time travelling to and from games.

High performance university athletes represent another sporting population that have received some research attention to date. Student-athletes sit within a wider student body whilst also belonging to elite or quasi-elite sporting environments, and often perform social identities that emulate their professional counterparts (Bowles, 2018). The popularity of gambling on university campuses and among university students has become an increasing cause for concern, with higher rates of gambling related activity reported among college students compared to other population segments (Martin et al., 2016). In the UK, The Gambling Commission (2017) report two in every three undergraduate students have gambled in the last six months.

University students are thought to be particularly susceptible to gambling addiction for a combination of factors described by Nowak (2018b, p. 241) as a 'perfect storm'. These factors include: *age* with university representing a period of youth synonymous with experimentation with various risk behaviours; *availability* of an array of gambling opportunities and products both of a formal and informal, legal and illegal nature; *acceptability* of gambling within liberalised gambling societies and

cultures; *advertising* aimed at promoting, glorifying and normalise gambling engagement; and *access* to money from student loans, parental support and credit lenders (Nowak, 2018b).

Researchers have consistently asserted that student-athletes are an especially highrisk group to gambling related harms (Ellborgen et al., 2007; Huang et al., 2011; Martin et al., 2016; Nowak, 2018a & b; Richard et al., 2019). The majority of this research emanates from the US and has employed survey-based research designs and quantitative analyses to understand prevalence as well as differences between populations in relation to gender, ethnicity, sport type and level of performance. Early research by Cross et al. (1998) noted student-athletes who gambled held more permissive attitudes towards risk than their non-gambling peers. Furthermore, tolerance to risk taking was more prevalent among contact sport athletes compared to non-contact sport athletes. More recently, Richard et al. (2019) observed that while the prevalence of gambling among student-athletes in the US appears to be on a downward trend, gambling remains more prevalent among male compared to female student-athletes.

Alongside the risk of developing pathological and problem gambling behaviour that they share with their non-athlete peers, an acute concern related to student-athletes involves the economic, reputational, and personal risks posed by sport-related corruption and breaches of integrity rules. Indeed, athletes and coaches involved in elite university sport in the UK are subject to gambling regulations similar to their professional counterparts. For example, players, students and staff associated with a British University and Colleges Sport Super Rugby member institutions (BUCS/BSR) are prohibited from: placing a bet (or asking someone to place a bet for them) on any BUCS Super Rugby match; misusing or passing on information to any third party, such as injuries or selection, that is not already public knowledge; accepting money or gifts from any third party in return for inside information or performance manipulation in a match (see also Gambling Commission, 2018). In some instances, university sports teams participate alongside professional clubs in sporting competitions that expose them to the same betting regulations designed to protect lucrative gambling markets.

Lastra et al. (2018) report that the closed environment of sport, financial issues and comparative earning from sport are among the risk factors for susceptibility to corruption. Individuals involved in lower-tier sport (e.g., student-athletes) are at a greater risk of corruption because they have more to gain, less to lose and less chance of detection (Forrest et al. 2008). There is a long history of event manipulation in sport ranging from organised attempts to affect the outcome of sporting competition to spot-fixing (Higgins, 2018). Being tempted to spot-fix (or pass on information) is a bigger risk because it can be done without the collusion of any other participant in the game and it need not impact the result (Misra et al., 2013; Gambling Commission, 2018).

Given the multiplicity of risk and the pervasiveness of gambling among the general population, young people, sporting sub-groups and university students, student-athletes (specifically team-based athletes) represent a particularly vulnerable population to gambling related harms. The aim of this research therefore was to explore the gambling attitudes and behaviours of a select group of British student-athletes to further current insights into gambling cultures in sport. Specifically, the research was interested in the role gambling played in their lives, how they viewed sport betting and other

gambling related activity, what role (if any) gambling promotion and peer influences had in their gambling, how they viewed or conceived 'problem gambling' and how they navigated through or related to the gambling restrictions they faced.

METHODS

Participants and recruitment

In line with previous qualitative studies in the field of gambling (e.g., Killick & Griffiths, 2021), a convenience sample of student-athletes (male and female rugby and football players) were recruited from one university in the United Kingdom with a reputation for elite student sport (i.e., the sample would be subject to betting regulations). Participants were sampled from the university's men's and women's rugby and football clubs all of which competed in the premier divisions of their respective BUCS championships and fielded sides in non-student National leagues and competitions.

Access to participants was sought through gatekeepers to each of the targeted sport clubs. These individuals were known to the research team and acted as conduits to identify individuals willing to take part in the study, from which a total of fourteen athletes were recruited. The sample consisted of undergraduate and postgraduate students as well as two alumni athletes who continued to compete for their respective university sport clubs (see Table 1 below). All participants were provided with an information sheet and were asked to provide their voluntary informed consent prior to the commencement of data collection.

Table 1 Descriptive summary of student-athlete participants

Participant	Age	Graduate Status	Team Affiliation
Lea	26	Graduate	Women's football
Tina	26	Postgraduate	Women's football
Alice	21	Undergraduate	Women's football
Dave	21	Undergraduate	Men's rugby
Simon	20	Undergraduate	Men's rugby
Cain	22	Graduate	Men's rugby
Alec	21	Undergraduate	Men's rugby
Nick	20	Undergraduate	Men's rugby
Luke	20	Undergraduate	Men's rugby
Sam	20	Undergraduate	Men's rugby
David	21	Undergraduate	Men's rugby
Sarah	26	Postgraduate	Women's rugby
Lacie	20	Undergraduate	Women's rugby
Jane	23	Postgraduate	Women's rugby

Method and procedure

Qualitative data were collected using a focus group interview method and were organised according to team affiliation (see Table 1). The focus group method has been used widely among gambling researchers (e.g., Gordon et al., 2015; Lamont & Hing, 2019; Lamont & Hing, 2020; Lopez-Gonzalez et al., 2020; McGee, 2020) and was selected in order to stimulate open and exploratory discussions among participants in a setting where they felt encouraged to share their views and experiences with the researcher (Conlin & Sillence, 2021). Focus groups were arranged in-person and were conducted in a relaxed and informal manner to ensure individuals felt comfortable discussing the subject of gambling in front of the researcher and their teammates. According to Kitzinger (1994), organising focus groups around pre-existing relationships (e.g., peer-groups) helps to generate the type of 'natural' interactions which may otherwise occur among friends around subjects related to their daily lives (such as gambling). It also enabled the interviewer to probe specific manifestations of gambling practice during the interview process.

To reduce the effect of social desirability on the data collected, several 'soft' interview strategies were used to establish rapport, build trust and encourage honest dialogue. For example, a semi-structured interview approach was adopted to allow flexibility in the direction and flow of the conversation and enable participants to raise issues or experiences that were important and most relevant to them (Deans et al., 2017b). Interview questions were carefully worded and posed in such a way to give participants time to reflect on their own and each other's experiences and offer insights in their own words (Lim et al., 2017). Participants were asked to comment on their attitudes towards gambling, their typical gambling activities, factors influencing their behaviour, the impact of gambling on their own and other's lives, and their understanding of sport betting regulations. These topics provided a general guide for discussion from which specific probing questions were tailored. The interviewer remained cognisant of body language to ensure all respondents had the opportunity to share their views uninhibited by perceptions of (negative) evaluation or judgement.

Participants were also assured that only anonymised data would be used in the reporting of the study's findings and that their participation in the research would not be disclosed. The focus group method, however, creates ethical difficulties in upholding individuals' right to privacy. In response to this challenge, verbal assent to Chatham House Rule was established prior to the start of each interview whereby participants agreed not to divulge the contents of discussions outside of the interview, unless done so in an appropriately anonymised manner (Bloodworth & McNamee, 2010). Interviews were audio recorded using a digital Dictaphone and transcribed verbatim by the interviewer.

Analysis and interpretation

Data were interrogated through an iterative process of open coding to examine how gambling risk manifests in the attitudes and behaviours of student-athletes. A combination of inductive and deductive reasoning was applied to identify and label content and categorise data into salient themes (a form of patterned response) and concepts. Analysis was performed at a semantic and latent level of the text to understand both

the explicit and surface meaning of the data and the underlying ideas and conceptualisations informing the semantic content (Braun & Clarke, 2006).

The researchers approached the task of analysis independently to establish an initial reading of the data. Following familiarisation, data were coded before being organised (grouped) into representative themes. Preliminary descriptive interpretations were then shared and discussed among the authors to begin the process of developing more meaningful units of analysis and interpretation. Through a continual process of examination, organisation and cross-checking, a series of overarching themes were determined from which a representative sketch of participants' attitudes and experiences was constructed and refined.

RESULTS

From the analysis of data, a thumbnail sketch of some areas of concern associated with the gambling behaviours and attitudes of student-athletes is presented. Results are organised into four broad and descriptive themes and are presented as an interpretive representation of the views and experiences of the sampled group – 'gambling as normal', 'impact of socialising agents', 'signals of problem gambling' and 'integrity and vulnerability'. Selected quotes are used in illustration of salient features within the data and in support the analysis. Following Lim et al. (2019), the intention is not to provide an empirically valid and generalisable account of student-athletes' gambling behaviour, but to offer some exploratory qualitative insights that complement existing knowledge about gambling among young people and university-based sporting populations specifically.

Gambling as normal

All participants saw gambling as a normal, budgeted leisure activity like going to the pub or cinema. For many it was a shared interest that served to ease boredom and pass the time. Spending money on gambling was a personal choice like shopping for clothes or going out for a meal with friends. There was no stigma associated with gambling per se when perceived in connection with their own behaviour and habitual gambling choices.

Visiting casinos or online gambling on sport (using mobile phone apps and devices) were the most frequently mentioned forms. The casino satisfied the urge to "get out of the house", to socialise and have some fun "without having to get drunk". Gambling was perceived as less harmful compared to 'risky' forms of consumption, like drinking alcohol. A sober outing to the casino was less detrimental to performance than a night out drinking. Indeed, gambling was something that friends, family and coaches might encourage as an alternative to drinking.

Nick [MR]: My dad has the view [that] ... if you're going to the casino – rather than going to the pub – it's probably actually better for you because you're not actually getting drunk or anything.

Here, the well-documented risks of gambling are downplayed relative to alcohol suggesting an insufficient awareness of gambling risks, and the penetration of establishment discourse into individually held attitudes and beliefs. Indeed, gambling was discussed as a personal, adult choice that was harmless when performed in "moderation".

The normality and relative harm of gambling was reinforced within perceptions of gambling's relative cost. Most participants discussed arbitrary weekly spends of between £5 and £20 pounds that were perceived as insignificant and affordable. Furthermore, when the cost of gambling was considered in light of additional online or land-based industry incentives, gambling was deemed good value for money.

Sam [MR]: It's [casino] not an expensive option. If you take £20 and say you are going to spend £20, compared to somewhere else like a night out where you spend over £50 easily.

Nick [MR] Also that £20 could last you four or five hours, so you could go in there and lose it straight away or you could be in there all night. So, it's just another thing to do.

Visiting the casino, for example, included 'perks' such as "a free buffet", "free [soft] drinks", "big TVs [televising sport]" and "free [town centre] parking" which made gambling in this way a more alluring and holistic form of socialising and source of harmless entertainment.

Though gambling was seen as an attractive, more affordable and less risky alternative to consuming alcohol, it was also performed in combination with activities explicitly or implicitly connected to drinking like going to the pub with friends and/or watching televised sport (at home, in pubs or casinos). Though gambling as means of acquiring money was not a frequently cited explanation for gambling across the sample, one participant, Dave [MF], explained gambling for him and his teammates was a means of "getting some extra money for the weekend" to fund participation in team socials. Dave went on to explain, "so if we [teammates] play on Saturday, we put £5 on [bets] and try and get £100 back which is a bonus for the night out really". More typically, participants framed their gambling behaviours as a surplus and convenient form of ordinary leisure that could be factored into the weekly cost of living, as the following quotations indicate:

Lea [WF]: Sometimes I like to bet whatever's in my pocket after a night out ... So, if I've come home with cash and I've got £16 in my pocket – that's not very often – but when I do, I just think "I'll put that on an accumulator."

David [MR]: Say I have done a [food] shop and I've got 'this' much money left over, I could go buy a new jumper, go out for dinner or go to the casino. That's just something I'll do.

Impact of socialising agents

Evident within the data was the impact of some key socialising agents on the gambling behaviour of the sampled group. As previously alluded to, gambling was most often positioned as a shared experience with data revealing specific ways significant others influenced the gambling of participants. Those who did gamble started close to or after turning 18, joining in with the behaviours of peers (e.g., teammates). For Simon [MF], his engagement with gambling coincided with the start of university. He explained going to university provided him with additional freedoms to "do stuff without parents knowing", from which point his gambling had progressed. Others, however, talked about following the example of parents or family members.

Tina [WF]: I am an occasional gambler. I started a few years ago via an app on my mobile and I probably started because my brother always wins and was making lots of money and I wanted to join in.

Other than women's rugby participants, among which gambling appeared less prevalent, gambling was commonly interpreted as "a nice social thing" within and between teams, and amid the wider student population. For men and women's footballers in particular, gambling was a quasi-ritual to fill time before fixtures. Gambling was depicted as forming part of pre-match conversations that were neither encouraged nor actively policed by coaches.

Simon [MF]: On a Saturday, say if we have an away game, we'd leave probably at like 9.00am ... It will be like 11 o'clock where we have a pre-match meal ... and everyone will be on their phones just trying to follow an accumulator together ... asking each other what everyone is putting on and stuff like that.

In amongst this type of face-to-face, peer-group conversation about "who's got who", there was evidence of other influencing mechanisms that fell both within and outside the immediate team environment. For example, social media groups were identified as a form of exposure to gambling discourse and encouragement among friends/ teammates. As Jane [WR] indicated:

Jane [WR]: I know like I've got a [WhatsApp] group chat with all the [rugby] boys and they're like, "Alright boys. Let's go get your bets in." Like, it's just a huge thing for them ...

There was also some evidence of direct and deliberate peer pressure to gamble manifest in relationships players help with others.

Tina [WF]: I've actually encouraged my partner to put bets on so that she might watch the football with me.

[Laughter]

Tina [WF]: If I really want to watch football, I'll be like "aw put a bet on, put a bet on" and then she actually will watch it because she's put a bet on.

Lea [WF]: And then they [partners] start counting the corners, so it makes it exciting for them.

Here a specific peer influence is illustrated, perhaps a unique kind of gateway, where individuals start gambling to fit in or to 'please' a partner even though initially they have no real interest in the activity. In this instance the 'partner' (not included in the study) was a female rugby player not really interested in gambling on sport.

Accompanying the influence of peers and significant others, participants in this study were acutely aware of, and somewhat susceptible to, marketing – including TV commercials, sponsorship of sport's teams, events and competitions, and social media (Twitter and Instagram).

Participants made references to a range of 'high-street' gambling brands and online betting products that they were either familiar with or regular uses of. Some even expressed a sense of brand loyalty based on "sassy" advertising strategies, marketing incentives (e.g., free bet "boosts"), accessibility (facilitated by mobile apps and social media communications) and social media-based features such as "#YourOdds" that enable the creation of personalised betting markets². Participants were also cognisant

^{*}YourOdds is marketed by William Hill as 'our way of making your quirkiest punting premonitions a reality'. To create a bet, punters can simply Tweet William Hill a scenario who will return a price on it happening. https://promotions.williamhill.com/offer/yourodds.

of marketing that incentivised downloading apps or setting-up accounts and were able to articulate in detail (based on experience) how these incentives worked.

Simon [MF]: There's loads of little things where you don't even have to bet with money anymore. So, like on a Saturday there's a thing called Super Six where Sky give you six games to correctly predict the score. [If you win], you get 250k ... It's like a little teaser. Once you're on that app, after you put all your scores in, they'll say "if you actually put money on this you will get this much value". So, it kind of gets you into thinking "I might as well put a fiver on it" anyway.

Revealingly, all participants associated sport betting with men's football, and many were even critical of the strength of this association despite being frequent consumers. Football was conveyed as a "simple" and less "complicated" sport to watch and bet on (compared to rugby), requiring less knowledge of the rules to follow the game and offering "so much more" to gamble on. Indeed, the variety of betting markets available within men's professional football was deemed more exciting compared to rugby or the women's football. The overt marketing presence of gambling within men's football was also emphasised.

Lea [WF]: I don't think they [gambling companies] make [women's football] exciting enough for me to bet on ...

Tina [WF]: Yeah, they only have basic bets like 'who's going to win' and that really bores me ... I like to bet on individual players, and I feel that I know men's football that well and it will help me win. I think that when I watch men's football, I am encouraged to gamble. Just because you see it so often and it's more fun to bet on ...

The notion of 'knowing' as a motive and source of confidence to gamble was repeatedly cited across participants, which the socialising effects of marketing were perceived to play on.

Nick [MR]: When you're watching live on sky sports, they always come up with a fact like "Burnley haven't won away at Tottenham in four years" ... [laughter]. You would have never researched or found out that and they just come out with it, so you just think "Mate, I've got to bet on that" ...

Cain [MR]: But TV channels like Sky, will do that because they have SkyBet. They are probably working together to get those vulnerable people on the sofa.

Indeed, participants were conscious of intelligent or targeted marketing that exploited a multiplicity of media in a very connected and joined up way. They were aware that gambling could become a problem and recognised (particularly in relation to some marketing strategies) a more sinister and cynical industry trying to encourage gambling. Yet, in spite of this awareness, participants also admitted to responding to certain sport betting promotions if an attractive market was offered.

Signals of problem gambling

Participants suggested that 'problem gamblers' displayed distinctive forms of behaviour such as solitary gambling, large transactions, fluctuations in spending, loss of control over finances, debt, borrowing, chasing losses and jeopardizing friendships/relationships. In addition, similar to the way participants rationalised their gambling as normal, arbitrary weekly spends (or amounts lost) were used to distinguish gambling as a problem. Interestingly, each focus group produced a story (or two) about someone who participants knew or suspected had an issue with gambling for a collection of reasons.

Simon [MF]: There's a lad called Jason. He used to like to bet a lot. He was putting on like £50 a week and then he'd win big but because he keeps putting so much money on, he'd just lose big as well. And then he bet on like random games ... But then I think he owed quite a lot of money because he was gambling. ... He got really bad at one point and then started betting on like Arabian football and like random tennis matches and at like 1am in the morning.

Although participants had a reasonably 'accurate' view of problem gamblers (many of their observations fit with the DSM-5's criteria), most did not feel particularly vulnerable³. Rather, when it came to reflecting on and conceptualising their own gambling behaviour, participants were quick to identify personal attributes like being "stingy" or possessing self-control that made them less susceptible to developing a gambling problem.

Sam [MR]: Well I would never, 'touch wood', get addicted. I know myself; I would never be addicted to gambling.

Cain [MR]: I suppose it just depends on how strong you are as a person. If you earn X amount of money a month and you say, "I'll limit myself to X amount", then I'm fine.

Only one participant [Lacie, WR] was concerned about predisposition to addiction because of an addictive personality and/or history of addiction in the family. Other than this specific example, none of the participants expressed concerns over their own gambling or gave sufficient weight to any 'red flags'.

Tina [WF]: If I knew someone that gambled as much as me ... I would just think that they were sensible and that they fit into the 'average gambler [bracket]' ... My partner would disagree and say that I have a problem because she made me delete my betting app ... She said I was spending money when I didn't have the money to spend ...

While behaviours like avoiding betting when drunk, setting limits, and deleting apps were used as symbols to denote self-control, boredom was frequently mentioned as a motive to gamble, and some participants admitted that boredom often tempted them to reinstall apps or re-open accounts they had deleted.

Alice [WF]: I don't like having betting apps on my phone because I know that when I'm bored, I will just go on there and bet. So I delete. Then when I'm bored I just download them again [laughs].

Though mood manipulation and an inability to stay away from gambling could be viewed as indicators of problem gambling, by and large, participants' sense of vulnerability to developing related problems, was displaced through a process of 'othering' that posited an identity on the "type of people" that typified problem gamblers and problem gambling. Indeed, going to the casino with friends or placing bets on sport through mobile technology was a distinct (and normal) mode of gambling consumption from that which "low lives" and "old men" in betting shops participated in. As Sam [MR] put it, "I don't think we [he and his teammates] are on that level; do you know what I mean?"

The DSM-V lists 9 characteristics of problem – these include 'concealing gambling activity', 'asking others for money to help resolve gambling debt', 'chasing losses', repeated unsuccessful attempts to cut down'. A diagnosis of gambling disorder is given when 4 out of 9 are present. https://www.psychiatry.org/patients-families/gambling-disorder/what-is-gambling-disorder.

Vulnerabilities to breaking the rules

A number of specific areas relating to participants' perceptions of betting regulations were identified in the data. Despite receiving 'education' on the rules to which they were subject, participants displayed an ambivalence and naivety towards betting regulations. Most participants were aware that they were subject to certain betting restrictions both as players and as individuals working within the sport industry. Participants reported having received annual gambling education in the form of a "leaflet", "conference" or "workshop", however, there was uncertainty about the authority (i.e., illegality versus codes of conduct) of gambling regulations and their scope. Indeed, in comparison to the knowledge participants displayed about the availability of gambling products, their understanding of betting integrity, how they might intentionally or unintentionally break the rules (e.g., by passing on information to a third party), and the extent to which breeching the rules might affect them, was limited.

Luke [MR]: I think that [the content of the workshop] was more towards betting on us [University RFC]. So, say if we could access ourselves on a betting site, that could be classed as fixing. Obviously, we aren't that professional so it's probably only one game a year that we could bet in, in the [National] Cup.

As indicated within the above quote, participants mentioned 'match-fixing' as the paradigm offence. In other words, being caught deliberately manipulating the result of a match was viewed as the principal integrity breach. There was, however, some tentative discussion about other ways of falling foul of the rules.

Alice [WF]: I don't think we are at the level that people bet on us.

Tina: [WF]: Although my brother did bet on us when we went to the [international competition] when we won 2–1.

Alice [WF]: I don't think he's allowed, is he?

The potential integrity issue here is profiting from 'inside information' by virtue of participants being uniquely placed *vis a vis* information (knowledge) not in the public domain. The regulations are breached even if the information is 'innocently' passed to a third party (brother) who then profits from it. Nevertheless, understanding of the issue was depicted without clarity or confidence.

As previously described, most participants routinely bet on elite televised football even though at certain times they are not permitted to do so⁴.

Lea [WF]: I'm not actually allowed to bet on football so it's more 'under the radar' betting ... when I see other people going to bet I think, "why not, I might as well do it." But then obviously if I did win big, I wouldn't tell anyone because I'm not allowed to⁵ ...

Interviewer: Does that not scare you?

Lea [WF]: No because I always think that I'm not going to win a ridiculous amount of money, I only bet £5, £10 here and there. So, it's not a life-changing amount.

⁴ Uefa's code of conduct discourages players to bet on football. Specifically, players (including coaches, partners and family members) in European Leagues are not permitted to bet on themselves, their opponents or any match within a competition they are involved in. https://www.uefa.com/MultimediaFiles/Download/uefaorg/Clubs/02/14/97/66/2149766_DOWNLOAD.pdf

Lea works for a football club so is prohibited from gambling on all football in the UK on that basis.

In this instance, the likelihood of getting caught was downplayed and only became 'risky' in the unlikely event of winning a significant amount of money. Such risks were perceived as being easily mitigated by limiting the size of stake and the comparative low profile of the betting market. Encouragingly none of the participants admitted to more serious and systematic breaches of the regulations and in some cases explicitly rejected the proposition:

Alice [WF]: I would never bet on one of my mates who plays in the WSL 1 (Women's Super League).

Finally, participants shared belief that 'knowing' the sport shifted the balance in favour of the 'punter' exposed a possible temptation (and vulnerability) to bet closer to home:

David [MR]: I'd definitely feel more confident if I was to bet on rugby now, like I'd have a better idea of what was going to happen. I feel like I could be able to predict it more accurately now, because you just know it better ...

Sam [MR]: I definitely only bet on the things that I know, as David said. I would never bet on like women's badminton – I don't know, I have no idea what's going to be the outcome of it.

Tina [WF]: ... the odds for women's football make me want to gamble because I don't think the betting companies have a good understanding of who the good teams are.

DISCUSSION

The purpose of the present study was to explore the gambling habits and attitudes of a hitherto under-researched population, namely British student-athletes subject to gambling integrity rules. From focus group data derived from male and female student football and rugby players, the research offers a series of qualitive insights that complement and extend current knowledge on how gambling manifests among this specific population. Based on a thematic analysis of the views and experiences expressed by the studied group, four broad areas of concern (themes) emerged.

The first related to the way participants conceptualised and justified *their* gambling as 'normal'. Most of the participants engaged in some form of gambling. For the majority, gambling on sport (men's football) using online accounts and mobile devices was a regular activity that they participated in without stigma, a finding which supports previous research that has warned of the popularity (Deans et al., 2016a), accessibility (Griffiths et al., 2011; Killick & Griffiths, 2020) and 'facelessness' (McGee, 2020) of this mode of gambling for young adults and adolescents. Furthermore, routine visits to the casino with friends/ teammates was another mode of gambling conceived as 'social', 'budgeted' and thereby normal. Indeed, when compared to other forms of leisure, there was strong evidence to suggest that participants bought into the 'establishment discourse' that gambling was a relatively harmless activity with minimum risk (Orford, 2020). In this sense, participants' attitudes reflected the discourses of the gambling establishment that have successfully normalised gambling as a legitimate, freely chosen, and harmless form of entertainment in liberal gambling jurisdictions such as the UK (Cassidy, 2020; Orford, 2020).

Another area of concern related to participants' susceptibility to known socialising agents. The influence of targeted marketing is a widely reported risk factor shaping the gambling behaviours and perceptions among young people with an interest or involvement in sport (Deans et al., 2016b; Deans et al., 2017a; Hing et al., 2013; Hing et al., 2016). The findings from the present study provide further illustrative evidence of the pervasiveness and penetration of marketing strategies deployed by the sport betting industry via multi-media channels (Gainsbury et al., 2016), as demonstrated by participants' familiarity with, preference for and detailed understanding of several gambling products, markets, and incentives. Research has identified an extensive list of gendered advertising themes tailored towards specific (male) populations including friendship, sexulaised images, social status, winning, thrill seeking and risk (Deans et al., 2016a). In addition, Gonzalez-Lopez et al. (2018) highlight 'knowledge of sport' as a core feature of sport betting marketing designed to increase illusions of control over gambling outcomes, a belief which gamblers undergoing psychological treatment for gambling disorder find it difficult to reconfigure (Gonzalez et al., 2020). Tellingly, the student-athletes in this study appeared to have largely internalised 'knowing' as a reason to bet on one sport (team or match) over another alongside perceptions that some sports (football) are easier to bet on than others.

Findings from the study also suggest participants' gambling was exercised through a peer-group culture and gambling ethos. Gambling often begins in the context of social groups before progressing into more compulsive and solitary behaviour (Killick & Griffiths, 2021). Indeed, Gordon et al. (2015) emphasise gambling as a social and cultural process expressed through collective practices, shared values, social interaction and identities. Furthermore, Deans et al. (2017b) note that gambling can act as a natural and socially accepted 'ad on' to watching sport within male peer groups. Although there was scant evidence of an excessive gambling culture previously identified within professional team sport environments (Lim et al., 2017; Vinberg et al., 2021), gambling was positioned as part of everyday conversation both inside and outside the team environment (Deans et al., 2017b; McGee, 2021) that run concurrently with their sporting participation. While there was limited direct evidence of participants' experiencing an explicit social pressure to gamble from within their respective sports clubs, gambling was depicted through the prism of significant relationships (friends, teammates, family members, partners) that could, or were used to, exert an influence.

Although participants were aware of signs and signals of problem gambling, they did not realise how their own gambling might become a problem. Problematic gambling behaviours lie on a continuum (Orford, 2020). The DSM-5 description classifies gambling disorder as a matter of degree ranging from mild, moderate to severe. Becoming an addict is a result of a process involving several stages, including placing your first bet (Orford, 2010). Research also suggests patterns of gambling behaviour (specifically online sport betting) are not perceptively different between 'recreational' and 'problem' gamblers other than frequency (Braverman et al., 2011). Classification is more complex among young people with the 'qualities of youth' (e.g., emulation, impulsivity, risk taking, experimentation, emotional distress) camouflaging features of gambling disorder (Shaffer, 2011). Moreover, Nowak (2018a & b) warns of a 'perfect storm' of factors related to age, availability, acceptability, advertising, and

access heighten university students' risk towards developing problematic gambling behaviours. Though aware of gambling's addictive potential and the capacity for gambling to develop into an individualised 'problem' (e.g., through a lack of self-control), participants were largely uncritical of their own gambling practices and choices. Instead, participants distanced themselves from images they conceived as stereotypical of problem gamblers and demonstrative stories of problem gambling.

Finally, while this study found no evidence of systematic attempts to break integrity rules – which is perhaps unsurprising given that betting-motivated corruption is a hidden behaviour reliant on secrecy (Lastra et al., 2018; Numerto, 2016) - findings reinforce the general view that integrity related issues are a valid cause for concern in (quasi) elite student-athlete populations (Richard et al., 2019). Participants lacked detailed appreciation of the regulations to which they could (willingly or unwillingly) fall foul, particularly about the sharing and use of inside information. It was notable that participants were more hesitant and less coherent when discussing the rules to which they were subject and how they might affect them, as they were about describing their gambling behaviours and justifying their normality. For student-athletes whose participation in leagues and competitions is exposed to minor betting markets (in terms of liquidity), it is easy to envisage situations where betting-related malpractice, brought on by financial stress, changes in career, identity and life aspiration, or simple opportunism, might occur. This is consistent with the consequentialist argument that gambling and non-gambling related corruption are decisions driven by rational evaluations of personal and situational constraints and incentives (Forrest et al., 2008; Lastra et al., 2018). It is our view that a central limitation of anti-corruption education is its failure to develop a reflexive awareness about their positionality in relation to gambling, risk, temptation and the rules.

LIMITATIONS

Findings from the research should be interpreted with reference the study's limitations. Difficulty in recruiting student-athletes who were willing to speak openly about gambling restricted the scope of the research and the transferability of the results beyond the small convenience sample (Killick & Griffiths, 2020). Furthermore, participants were not purposefully screened and categorised according to their gambling behaviour resulting in the focus groups' discussions being informed by a mixture of gambling experiences and perspectives. While attempts were made to extenuate the challenge of social desirability (Conlin & Sillence, 2021; Lamont & Hing, 2020) through the utilisation of a semi-structured approach, open-ended questions and other 'soft' interview techniques, there is no way of evaluating whether these strategies had their desired effect. However, based on a reflexive assessment of the interview process, and the richness of the data gathered, the study was successful in achieving the modest ambition of drawing meaningful insights into the gambling attitudes and behaviours of student-athletes that complement and extend understanding of how gambling vulnerabilities and risks exist within this particular group of young people.

CONCLUSION

This preliminary analysis adds to a body of literature which has identified gambling's popularity and normalisation as a serious public health issue (McGee, 2020). Gambling can cause a multiplicity of harms (Abbot et al., 2013; Orford, 2010) to which young people are increasingly exposed (Shead et al., 2011). Though confined to a small and specific group, the qualitative findings from this study provide a foundation for future research into how gambling effects this subset of the student population that researchers have consistently asserted are at additional risk to gambling harms (Cross et al., 1998; Ellborgen et al., 2007; Huang et al., 2011; Richard et al., 2019). To inform policy, education and harm prevention, research should seek to produce more fine-grained, multi-method and longitudinal insights into the ways gambling is embedded as a form of social and (sub)cultural practice among athletic populations and university students more broadly. This study also identifies an opportunity for future research to examine nuances of gambling practices from a social cultural perceptive including specific gendered practices. Finally, we consider it an integral part of the future research to begin from a position of criticality in interrogating the ethical dimensions of the 'gamblification' of sport and the production of (young) sports men and women who gamble.

REFERENCES

- Abbott, M., Binde, P., Hodgins, D., Korn, D., Pereira, A., Volberg, R., & Williams, R. (2013). Conceptual framework of harmful gambling: An International Collaboration. Guelph, Ontario: Ontario Problem Gambling Research Centre.
- Binde, P. (2009). Exploring the impact of gambling advertising: An interview study of problem gamblers. *International Journal of Mental Health and Addiction*, 7(4), 541–554. DOI: 10.1007/s11469-008-9186-9.
- Bloodworth, A., & McNamee, M. (2010). Clean Olympians? Doping and anti-doping: The views of talented young British athletes. *International Journal of Drug Policy*, 21(4), 276–282. DOI: 10.1016/j.drugpo.2009.11.009.
- Bowles, H. (2018). *University Cricket and Emerging Adulthood: "Days in the Dirt"*. London: Palgrave Macmillan.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. DOI: 10.1191/1478088706qp063oa.
- Braverman, J., Labrie, R. A., & Shaffer, H. J. (2011). A taxometric analysis of actual internet sports gambling behaviour. *Psychol. Assessment*, 23(1), 234–244. DOI: 10.1037/a0021404. Cassidy, R. (2020). *Vicious Games*. London: Pluto Press.
- Conlin, M.-C., & Sillence, E. (2021). Exploring British adolescents' views and experiences of problematic smartphone use and smartphone etiquette. *Journal of Gambling Issues*, 46, 279–301. DOI: 10.4309/jgi.2021.46.14.
- Deans, E. G., Thomas, S. L., Daube, M., & Derevensky, J. (2016a). "I can sit on the bench and punt through my mobile phone": The influence of physical and online environments on the gambling risk behaviours of young men. *Social Science and Medicine*, 166, 110–119. http://dx.doi.org/10.1016/j.socscimed.2016.08.017.
- Deans, E. G., Thomas, S. L., Daube, M., Derevensky, J., & Gordon, R. (2016b). Creating symbolic cultures of consumption: An analysis of the content of sports wagering advertisements in Australia. *BMC Public Health*, *16*(208), 1–11. DOI: 10.1186/s12889-016-2849-8.
- Deans, E. G., Thomas, S. L., Derevensky, J., & Daube, M. (2017a). The influence of marketing on the sports betting attitudes and consumption behaviours of young men: Implications

- for harm reduction and prevention strategies. *Harm Reduction Journal*, *14*(5), 1–12. DOI: 10.1186/s12954-017-0131-8.
- Deans, E. G., Thomas, S. L., Daube, M., & Derevensky, J. (2017b). The role of peer influences on the normalisation of sports wagering: A qualitative study of Australian men. *Addiction Research and Theory*, 25(2), 103–113. DOI: 10.1080/16066359.2016.1205042.
- Derevensky, J., Sklar, A., Gupta, R., & Messerlian, C. (2010). An empirical study examining the impact of gambling advertisements on adolescent gambling attitudes and behaviors. *International Journal of Mental Health and Addiction*, 8, 21–34. DOI: 10.1007/s11469-009-9211-7.
- Ellenbogen, S., Jacobs, D., Derevensky, J., Gupta, R., & Paskus, T. (2008). Gambling behavior among college student-athletes. *Journal of Applied Sport Psychology*, 20(3), 349–362. DOI: 10.1080/10413200802056685.
- Flanagan, O. (2011). What's it like to be an addict? In: J. Poland & G. Graham (Eds.), *Addiction and Responsibility* (pp. 261–292). Cambridge: The MIT Press.
- Forrest, D., McHale, I., & McAuley, K. (2008). "Say it ain't so": Betting-related malpractice in sport. *International Journal of Sport Finance*, 3(3), 156.
- Gainsbury, S. M., Delfabbro, P., King, D. L., & Hing, N. (2016). An exploratory study of gambling operators' use of social media and the latent messages conveyed. *Journal of Gambling Studies*, 32(1), 125–141. DOI: 10.1007/s10899-015-9525-2.
- Gambling Commission (2017). Students and Gambling. Birmingham: Gambling Commission. Retrieved from https://www.gamblingcommission.gov.uk/PDF/surveydata/studentsand gambling2017.pdf.
- Gambling Commission (2018). Misuse of Inside Information: Policy Position Paper. Gambling Commission. Retrieved from https://www.gamblingcommission.gov.uk/news-action -and-statistics/Match-fixing-and-sports-integrity/Sports-Betting-Intelligence-Unit.aspx.
- Gambling Commission (2019). Gambling Participation in 2018: Behaviour, Awareness and Attitudes: Annual Report February 2019. Birmingham: Gambling Commission. Retrieved from https://www.gamblingcommission.gov.uk/PDF/survey-data/Gambling-participation-in-2018-behaviour-awareness-and-attitudes.pdf.
- Gordon, R., Gurrieri, L., & Chapman, M. (2015). Broadening an understanding of problem gambling: The lifestyle consumption community of sports betting. *Journal of Business Research*, 68(10), 2164–2172. http://dx.doi.org/10.1016/j.jbusres.2015.03.016.
- Griffiths, M. D., Parke, J., & Derevensky, J. L. (2011). Remote gambling in adolescence. In: J. Derevensky, D. Shek & J. Merrick (Eds.), *Youth Gambling: The Hidden Addiction* (pp. 125–137). Berlin: De Gruyter.
- Griffiths, M. D., & Parke, J. (2009). Adolescent gambling on the Internet: A review. *International Journal of Adolescent Medicine and Health*, 22(1), 58–75.
- Higgins, M. (2018). Match-fixing: A historical perspective. *The International Journal of the History of Sport*, 35(2), 123–140. DOI: 10.1080/09523367.2018.1476341.
- Hing, N., Russell, A. M. T., Vitartas, P., & Lamont, M. (2016). Demographic, behavioural and normative risk factors for gambling problems against sports bettors. *Journal of Gambling Studies*, 32(2), 625–641. DOI: 10.1007/s10899-015-9571-9.
- Hing, N., Vitartas, P., & Lamont, M. J. (2013) Gambling sponsorship of sport: An exploratory study of links with gambling attitudes and intentions. *International Gambling Studies*, *13*(3), 281–301. DOI: 10.1080/14459795.2013.812132.
- Huang, J.-H., Jacobs, D. E. & Derevensky, J. L. (2011). DSM-based problem gambling: increasing the odds of heavy drinking in a national sample of U.S. college athletes? *Journal of Psychiatric Research*, 45(3), 302–308. DOI: 10.1016/j.jpsychires.2010.07.001.
- Iwamoto, D., & Smiler, A. (2013). Alcohol makes you macho and helps you make friends: The role of masculine norms and peer pressure in adolescent boys' and girls' alcohol use. *Substance Use and Misuse*, 48(1), 371–378. DOI: 10.3109/10826084.2013.765479.

- Jones, C. (2015). Football, alcohol and gambling: an unholy trinity? *AUC Kinanthropologica*, *51*(2), 5–19.
- Jones, C., Pinder, R., & Robinson, G. (2019). Gambling sponsorship and advertising in British football: A critical account. Sport, Ethics and Philosophy, 14(2), 163–175. DOI: 10.1080/17511321.2019.1582558.
- Killick, E. A., and Griffiths, M. (2020). Why do individuals engage in in-play sports netting? A qualitative interview study. *Journal of Gambling Studies*. DOI: 10.1007/s10899-020-09968-9.
- King, D., Delfabbro, P., & Griffiths, M. (2010). The convergence of gambling and digital media: Implications for gambling in young people. *Journal of Gambling Studies*, 26(2), 175–187. DOI: 10.1007/s10899-009-9153-9.
- Kitzinger, J. (1994). The methodology of focus groups: the importance of interaction between research participants. *Sociology of Health and Illness*, *16*(1), 103–121.
- Lamont, M., & Hing, N. (2019). Intimations of masculinities among young male sports bettors. *Leisure Studies*, 38(2), 245–259. DOI: 10.1080/02614367.2018.1555675.
- Lamont, M., & Hing, N. (2020). Sports betting motivations among young men: An adaptive theory analysis. *Leisure Sciences*, 42(2), 185–204. DOI: 10.1080/01490400.2018.1483852.
- Lim, M. S. M., Bowden-Jones, H., Salinas, M., Price, J., Goodwin, G. M., Geddes, J., & Rogers, R. D. (2017). The experience of gambling problems in British professional footballers: a preliminary qualitative study. *Addiction Research & Theory*, 25(2), 129–138. DOI: 10.1080/16066359.2016.1212338.
- Lastra, R., Bell, P., & Bond, C. (2018). Sports betting and the integrity of Australian sport: Athletes' and non-athletes' perceptions of betting-motivated corruption in sport. *International Journal of Law, Crime and Justice*, 52, 185–198. DOI: 10.1016/j.ijlcj.2017.11.005.
- Lopez-Gonzalez, H., Guerrero-Solé, F., & Griffiths, M. D. (2017). A content analysis of how 'normal' sports betting behaviour is represented in gambling advertising. *Addiction Research and Theory*, 26(3), 238–247. DOI: 10.1080/16066359.2017.1353082.
- Lopez-Gonzalez, H., Estevez, A., & Griffiths, M. D. (2018). Controlling the illusion of control: A grounded theory of sports betting advertising in the UK. *International Gambling Studies*, *18*(1), 39–55.
- Lopez-Gonzalez, H., Griffiths, M. D. & Estevez, A. (2020). Why some sports bettors think gambling addiction prevented them from becoming winners? A qualitative approach to understanding the role of knowledge in sports betting products. *Journal of Gambling Studies*, 36, 903–920. DOI: 10.1007/s10899-020-09944-3.
- Martin, R. J., Nelson, S. E., & Gallucci, R. A. (2016). Game on: past year gambling, gambling-related problems, and fantasy sports gambling among college athletes and non-athletes. *Journal of Gambling Studies*, 32, 367–578. DOI 10.1007/s10899-015-9561-y.
- McGee, D. (2020). On the normalisation of online sports gambling young adult men in the UK: a public health perspective. *Public Health*, *184*, 89–94.
- Misra, A., Anderson, J., & Saunders, J. (2013). Safeguarding sports integrity against crime and corruption: An Australian perspective. In: M. R. Haberfeld & D. Sheehan (Eds.), *Match-Fixing in International Sports* (pp. 135–155). Springer: Cham.
- Nowak, D. E. (2018a). Gambling disorder in the college student-athlete population: an overview. *Journal of Gambling Issues*, 39, 222–234. DOI: http://dx.doi.org/10.4309/jgi.2018.39.8.
- Nowak, D. E. (2018b). A meta-analytical synthesis and examination of pathological and problem gambling rates among college athletes. *Journal for the Study of Sports and Athletes in Education*, *12*(3), 240–257. DOI: 10.1080/19357397.2018.1525143.
- Numerto, D. (2016). Corruption and public secrecy: An ethnography of football match-fixing. *Current Sociology*, *64*(5), 699–717. DOI: 10.1177/0011392115599815.

Orford, J. (2010). An Unsafe Bet?: The Dangerous Rise of Gambling and the Debate we Should be Having. Oxford: Wiley-Blackwell.

- Orford, J. (2020). The Gambling Establishment: Challenging the Power of the Modern Gambling Industry and its Allies. London: Routledge.
- Pitt, H., Thomas, S. L., & Bestman, A. (2016). Initiation, influence, and impact: adolescents and parents discuss the marketing of gambling products during Australian sporting matches. *BMC Public Health*, *16*(1), 967. DOI: 10.1186/s12889-016-3610-z.
- Richard, J., Paskus, T. S., & Derevensky, J. L. (2019). Trends in gambling behavior among college student-athletes: A comparison of 2004, 2008, 2012 and 2016 NCAA survey data. *Journal of Gambling Issues*, 41. DOI: 10.4309/jgi.2019.41.5.
- Schüll, N. (2014). *Addiction by Design: Machine Gambling in Las Vegas*. Princeton: Princeton University Press.
- Shaffer, H. J. (2011). Forward. In: J. Derevensky, D. Shek & J. Merrick (Eds.), *Youth Gambling: The Hidden Addiction* (pp. 11–14). Berlin: De Gruyter.
- Sharman, S. (2020). Gambling in football: how much is too much? *Managing Sport and Leisure*, 1–2, 85–92. DOI: 10.1080/23750472.2020.1811135.
- Sharman, S., Butler, K., & Roberts, A. (2019). Psychosocial risk factors in disordered gambling: A descriptive systematic overview of vulnerable populations. *Addictive Behaviours*, 99, 106071. DOI: 10.1016/j.addbeh.2019.106071.
- Shead, N. W., Derevensky, J. L., & Gupta, R. (2011). Youth problem gambling: Our current knowledge of risk and protective factors. In: J. Derevensky, D. Shek & J. Merrick (Eds.), *Youth Gambling: The Hidden Addiction* (pp. 59–72). Berlin: De Gruyter.
- Thomas, S., Lewis, S., & Duong, J. (2012a). Sporting betting marketing during sporting events: A stadium and broadcast census of Australian football league matches. *Australian and New Zealand Journal of Public Health*, *36*(2), 145–152. DOI: 10.1111/j.1753-6405.2012.00856.x.
- Thomas, S. L., Lewis, S., McLeod, C., & Haycock, J. (2012b). 'They are working every angle'. A qualitative study of Australian adults' attitudes towards, and interactions with, gambling industry marketing strategies. *International Gambling Studies*, 12(1), 111–127. DOI: 10.1080/14459795.2011.639381.
- Vinberg, M., Wetterborg, D., & Enebrink, P. (2021). Gambling at work: a qualitative study of Swedish elite athletes, coaches, and managers. *Journal of Gambling Studies*, 1–21. DOI: 10.1007/s10899-021-10007-4.