Who uses custom sports betting products?

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Abstract

Background: The expansion of online gambling in the UK has been accompanied by an increase in the number of novel betting products, particularly for soccer. The present research investigates which types of sports bettors are the most likely to use novel gambling products called ‘custom sports bets’ (CSBs), which allow gamblers to create their own unique bets.

Method: A large-scale, cross-sectional survey of online sports/horse racing bettors (N = 789, 32.7% female). The survey collected two measures of CSB usage and four validated gambling measures: the Problem Gambling Severity Index, the Gambling Related Cognition Illusion of Control Scale, the Short Gambling Harm Screen, and the Consumption Screen for Problem Gambling.

Results: Overall, 62.0% of participants reported having used a CSB, and those who had used a CSB did so on an average of 29.4 days over the last year. Overall, 16.0% of participants who had used a CSB were current problem gamblers, compared to 6.7% among those who had not. CSB users reported an average of 2.3 out of 10 possible gambling harms, compared to 1.5 harms for those who had not used a CSB. The illusion of control scale was significantly positively correlated with whether participants had ever used a CSB before, but not with past year frequency of CSB usage. The usage of CSB products was most strongly associated with the frequency of gambling consumption.

Conclusions: Overall, these findings suggest that CSB products raise distinctive concerns around consumer protection for frequent sports bettors which deserve further investigation.

Keywords: gambling, problem gambling, gambling harm, gambling consumption

Introduction

The UK now has the world's largest regulated online gambling market (McArthur, 2018), and this growth has been accompanied by an increase in the variety and availability of sports betting products. Soccer betting is one of the most popular forms of gambling in the UK. It has undergone radical change in recent years. In the 1990s, people who bet on UK soccer matches could make only a very small number of bets before kick-off (Kuypers, 2000). Bets had to be made either in person at a Licensed Betting Office (also known as a betting shop or 'bookies'), or by telephone. Today, there are many more ways to bet, and not just on soccer, but virtually any sporting event. Bookmakers in the UK will quote odds for hundreds of bets for each soccer match before kick-off, and also permit bets to be placed during the course of a match -- known as 'in-play' gambling. There is now empirical evidence suggesting that novel gambling forms are most popular among those who exhibit signs of problem gambling (LaPlante, Nelson, & Gray, 2014). A study of Spanish sports bettors, for example, has shown a positive relationship between in-play sports betting and problem gambling severity (Lopez-Gonzalez, Estévez, & Griffiths, 2018). Similarly, in Australia, researchers have found that 'micro' in-play bets placed on events occurring in the next few minutes of a sporting event are used mostly by problem gamblers (Hing, Russell, Vitartas, & Lamont, 2016; Russell, Hing, Li, & Vitartas, 2019; Russell, Hing, Browne, Li, & Vitartas, 2019).

There has also been a general shift in soccer betting towards offering bettors more ways to bet at long odds (Newall, Thobhani, Walasek, & Meyer, 2019). This is notable given that soccer bets at long odds have also been shown to have the highest bookmaker profit margins (Hassanniakalager & Newall, 2019), and because problem gamblers are especially attracted to bets at long odds (Kyonka & Schutte, 2018). Long odds usually lead to the gambler losing small amounts of money (Feess, Müller, & Schumacher, 2014), offer what professional gamblers would refer to as 'poor value' (Potts, 2004), and can be especially attractive to

gamblers when combined with a financial bonus (Rockloff, Browne, Russell, Hing, & Greer, 2019). In economic terms, the expected value of a bet made at long odds is often smaller than the expected value of a bet made at short odds. This is because the occasional big wins on long odds bets do not sufficiently compensate for the average string of small losses.

The present research explores another novel but already widespread gambling product: 'custom sports bets' (CSB), which allow gamblers to create their own unique bets. A range of new sports betting products allow gamblers to customize their bet, by differing degrees, dependent on the product. 'Request-a-bet', for example, allows gamblers to contact bookmakers with their own custom bets using the social media platform Twitter (Newall, Walasek, Vázquez Kiesel, Ludvig, & Meyer, 2019). If the bookmaker is willing to quote odds on the bet, the Twitter user will receive a reply from the bookmaker with the quoted odds and a link to where the bet can be placed using the bookmaker's online platform. These bets can involve combinations of multiple outcomes, which are chained together to increase the potential payoff (at a cost to the probability of the event occurring). Some bookmakers also offer 'build-a-bet' products, which perform the same service, via the bookmaker's own online platform. Build-a-bet products reduce the gambler's freedom to combine individual events, but are faster to use since they do not require communication with the bookmaker on social media platforms. Similarly, 'edit-bet' products allow gamblers to change the terms of currently 'unsettled' bets ('unsettled' means that the outcome on which the bet has been placed is unresolved). Gamblers might choose to add or remove events from the bet, which could either increase or decrease the potential payoff. Edit-bet products therefore introduce an even greater level of customization than has existed previously in 'cash-out' products, which allow gamblers to cancel a bet entirely and receive some fraction of their original potential return with no further risk being taken. Cash-out products have also been previously associated with problem

gambling (Lopez-Gonzalez et al., 2018). This list is not exhaustive, but here we note that many contemporary wagering products involve an element of customization.

Although it is unknown when build-a-bet and edit-bet products were first brought to market, the timing of request-a-bets being introduced to the UK is known to be January 2017 (Roarty, 2017). The novelty of CSB products means that there is as of yet no empirical evidence on which types of gamblers use CSB products most frequently. Another novel soccer betting product, in-play betting, has been shown to be most popular among problem gamblers (LaPlante et al., 2014). Problem gamblers tend to have a greater number of cognitive biases than other gamblers, meaning that they systematically misunderstand the role of chance and randomness in gambling (Goodie & Fortune, 2013). One cognitive bias which appears especially relevant to CSBs is the 'illusion of control', whereby problem gamblers overestimate the extent to which their choices control fundamentally random events (Goodie & Fortune, 2013). For example, a problem gambler might mistakenly believe that throwing a pair of dice softly will increase their chances of rolling low numbers (Henslin, 1967). It might be that the ability to customize their own bets leads problem gamblers to overengage with CSBs due to this illusory perception of control over the random outcomes of sports matches. That is, simply by choosing a customized bet, the gambler falsely perceives that they have greater control in achieving the desired winning outcome.

Some gambling researchers have in recent years begun focusing on gambling-related harm as a distinct construct separate from problem gambling and cognitive biases amongst gamblers (Bowden-Jones, Dickson, Dunand, & Simon, 2019; Browne et al., 2016; van Schalkwyk, Cassidy, McKee, & Petticrew, 2019; Wardle, Reith, Langham, & Rogers, 2019). It is therefore interesting to consider whether sports bettors who use CSB products experience more harm than sports bettors who do not. However, no previous research has investigated the

possible contrast between the extent of gambling related-harm experienced by sports bettors who use CSB products and those who do not use these products.

Finally, it is unclear how a sports bettor's engagement with different gambling products varies across the bettor's level of gambling consumption and betting experiences. Many modern gambling products are dazzlingly complex and may appear confusing to novices. Novice gamblers might start off with conventional sports betting products, before moving on to newer and more complex sports betting products as their level of gambling consumption increases. Alternatively, it could be that experienced gamblers learn to avoid custom bets, because custom sports betting products are primarily useful for creating bets which offer poor value in the long term. In some related results, it has been found that problem gamblers in poker tend to be closer in decision making style to inexperienced than experienced poker players (Linnet, Gebauer, Shaffer, Mouridsen, & Møller, 2010; Linnet et al., 2012).

The present paper therefore investigates four research questions relevant to custom sports betting products:

1. Are people identified as 'problem gamblers' by the PGSI screen (Ferris & Wynne, 2001) more or less likely to use CSB products than other sports bettors?

2. Are illusion of control biases more prevalent among CSB users compared to sports bettors who do not use CSBs?

3. Do sports bettors who use CSB products experience more gambling-related harm than sports bettors who do not use CSBs?

4. How does the engagement with CSB products vary across sports bettors' level of gambling consumption?

Method

The present research investigated four research questions regarding the use of custom sports betting products via a large-scale, cross-sectional survey (*N* = 789) of UK residents who had all previously gambled online. The study design and analysis plan were preregistered prior to data collection, which along with the data, output from the full analysis script, and materials are available at https://osf.io/u4m6w/. The human research ethics committee of the University of Warwick approved the study.

Participants

Participants were each paid £0.68 to take part, and took an average of 3.7 minutes to complete the survey (translating to an equivalent hourly pay of £11.04). Participant demographics and individual difference summaries are shown in Table 1.

In total N = 789 (32.7% female) unique participants were recruited via the crowdsourcing platform Prolific Academic. This number of complete and unique responses was derived from a total of 803 people who started the survey. Participants were recruited from a total pool of 1,319 eligible potential participants who met the study pre-screening criteria (detailed in the final paragraph of this section). The preregistration of the study stated that the goal was to obtain data from N = 1,000 participants. Although we missed this target, we note that it was not tied to any confirmatory test but rather reflected the general aim to achieve a large sample of UK sports bettors.

Crowdsourcing platforms have become a popular method of data collection in psychology, as they can enable the fast collection of large samples compared to in-person research. Many classic laboratory-based psychological findings replicate well on crowdsourcing platforms (Crump, McDonnell, & Gureckis, 2013), and crowdsourced samples have been shown to provide more reliable data than university undergraduate samples (Hauser & Schwarz, 2016). Prolific Academic is a crowdsourcing platform with the

unique feature that experiments can be targeted only at the most relevant group of participants on the platform given a study's research questions (Palan & Schitter, 2018).

To be eligible for this study, participants must have previously indicated (on the Prolific platform) that they are a UK resident, that they have made either a sports bet or a horse racing bet online before ('What types of online gambling / casino games have you played?' Answer: — Race & sports book), and that they are a Premier League soccer fan ('Are you a fan of an English Premier League football team?' Answer: —Yes). This combination of pre-screeners was used to best target UK online soccer bettors, the group that has been presented with an increasing range of custom sports betting products in recent years (Lopez-Gonzalez, Jimenez-Murcia, & Griffiths, 2019), although we cannot rule out that some pure horse racing bettors may have participated.

[Table 1 about here]

Materials

Participants were first presented with a description of various custom bet products and asked whether they have used such products in the past. The exact wording was:

"There are now more ways to bet on sports and horse racing than ever before.

Many bookmakers now offer custom bet products, which gamblers can use to create their own unique bets.

Some examples:

'Request-a-bet' products allow gamblers to request odds on custom bets via Twitter

‘Build-a-bet’ products allow gamblers to combine individual bets into unique combinations via bookmakers' websites

‘Edit-bet’ products allow gamblers to change the stakes or terms of unsettled bets

Have you ever used any of these custom bet products to gamble? Yes/No”

This question provided a binary measure of custom bet usage, splitting participants into two groups: one group that had ever used CSB products before, and the other group that had not. If participants responded yes, they were asked:

‘On approximately how many days in the last 12 months have you used at least one custom bet product to gamble?

Enter a single number between 0 and 365 as an estimate.’

This second question provided a continuous measure of recent custom bet usage. In the statistical modelling this number was divided by 365 to create a fraction between 0 and 1 measuring participants’ frequency of past year CSB use (i.e., the proportion of days during the year where gamblers used CSB products). Any participants who responded ‘no’ in the earlier question had the value of ‘0’ inserted for this question. Note that participants could respond ‘yes’ and ‘zero’ to the two questions, if they had used a CSB previously, but have not made a CSB bet in the last 12 months.

Measures and Procedure

After completing the measure of CSB usage, participants then completed a range of validated gambling screens in random order: Problem Gambling Severity Index (Ferris & Wynne, 2001), the Gambling Related Cognition Illusion of Control Scale (Raylu & Oei,

2004), the Short Gambling Harm Screen (Browne, Goodwin, & Rockloff, 2018), and the Consumption Screen for Problem Gambling (Rockloff, 2012). Each of these screens was used to explore one of the present paper's four research questions. Participant demographics were also collected at this time.

Results

First we present a descriptive summary of the results, with the preregistered statistical analysis following. Responses to the first item in the Consumption Screen for Problem Gambling indicated that 98.5% of the sample had gambled in the past 12 months. The median gambler in the sample reported gambling on average two to four times a month in the past 12 months. This suggests that the data collection method was successful in recruiting active gamblers. In total, 62.0% of participants reported having used a CSB. This group of participants reported using a CSB product on 29.4 days on average in the last year (*SD* = 48.9). The last two columns of Table 1 split the sample into those who had, and had not ever, used CSB products. As can be seen, the only demographic variables that differed particularly were age and gender, with the average CSB user being almost three years younger, and being about 10% more likely to be male.

Overall, 16.0% of custom sports bettors were current problem gamblers (PGSI score 8+), compared to 6.7% among those who did not use CSB products. A post-hoc exploratory *t*-test indicated that PGSI score was significantly higher amongst CSB users, $t(787) = -4.56$, $p < .001$. Custom sports bettors had a mean Illusion of Control Scale score of 7.55 (*SD* = 4.93), compared to 6.79 (*SD* = 4.55) in the rest of the sample, a significant difference according to a post-hoc *t*-test, $t(787) = -2.16$, $p = .031$. Custom sports bettors reported experiencing an average of 2.35 out of 10 possible gambling harms (*SD* = 2.82), compared to 1.53 harms on average for the rest of the sample (*SD* = 2.32), a significant difference according to a post-hoc

t-test, $t(787) = -4.25$, $p < .001$. Custom sports bettors had a mean Consumption Screen for Problem Gambling score of 4.58 (*SD* = 3.11), compared to a mean of 3.08 (*SD* = 2.61) in the rest of the sample, a significant difference according to a post-hoc *t*-test, $t(787) = -6.98$, $p < .001$.

To begin the preregistered statistical analysis, correlations between the individual difference measures and the binary measure of custom bet usage are shown in the first column of Table 2 (point biserial correlations), as are correlations with the continuous measure of custom bet usage in the first row of Table 2. The patterns of statistical significance are almost identical for both measures. Only the illusion of control measure was not consistently significantly correlated with CSB usage ($r = .077$, $p = .031$ for binary; $r = .040$ $p = .261$ for continuous). Problem gambling severity ($p < .001$), gambling harms ($p < .001$), and gambling consumption ($p < .001$) were all significantly positively correlated with both measures of CSB usage.

[Table 2 about here]

Multiple regression analysis was used to determine which individual difference measures would most strongly predict CSB usage when all variables are entered in the model simultaneously. These results are presented below for the binary measure of CSB usage (using logistic regression); an almost identical pattern of results emerges when using the continuous measure (using fractal regression, where the proportion of days gambled in the last year was used as the dependent variable).[1] Full regression output from the fractal regression is available from https://osf.io/u4m6w/.

[1] The original preregistration states that Beta regression would be used for the continuous measure of custom bet usage. However, it is recommended that fractal regression (a similar technique) is used instead of beta regression when a significant proportion of the data is at one of the end points, as is the case here (Stata Corp, 2019).

In the multiple logistic regression, only gambling consumption was a statistically significant predictor of CSB usage (*OR* = 1.19, *z* = 5.11, *p* < .001), as shown in Table 3. This effect was unchanged by the addition of demographic variables as predictors, as shown in the last column of Table 3. Of the demographic variables, only age (*OR* = 0.97, *z* = -3.67, *p* < .001) and gender (*OR* = 1.48, *z* = -2.34, *p* = 0.019) were significantly related to CSB usage. However, the coefficient on gender was not significant in the fractional logistic regression on frequency of CSB usage (*OR* = 1.28, *z* = 1.26, *p* = .206). Based on the coefficients, CSB products appear to be especially popular amongst younger gamblers, and with higher popularity but not higher frequency of usage among men.

[Table 3 about here]

An analysis was then performed to check for potential multicollinearity issues in the multiple logistic regression. Following the preregistered analysis plan, gambling-harms was removed as an independent variable. This removal was made because problem gambling severity and gambling harms were the independent variables with the highest correlation (*r* = .82), and gambling harms had a weaker correlation than problem gambling severity with the dependent variable (Table 2). In this regression gambling consumption was again the only statistically significant variable (*OR* = 1.19, *z* = 5.13, *p* < .001). An identical pattern of results was observed with the fractal regression using the proportion of days gambled in the last year was used as the dependent variable. High gambling consumption was the individual difference variable most strongly associated with CSB usage.

Discussion

In general, CSB products were popular in a sample of 789 UK sports and horse racing bettors. In total, 62.0% of participants had used a CSB, and they used these products on an average of 29.4 days in the last year. The usage of CSB products was positively correlated

with problem gambling severity, gambling harms, and gambling consumption. CSB products were also most popular with young gamblers. The use of CSB products was not consistently correlated with the illusion of control measure. The illusion of control score was significantly correlated with whether the participant had ever used a CSB product (Table 2, first column), but not the participant's last-year frequency of using a CSB product (Table 2, first row). Out of the individual difference measures used in the present study, CSB usage was most strongly associated with gambling consumption.

There were some differences in the bivariate and multivariate analyses. Problem gambling, gambling harms, and illusion of control were significantly correlated with CSB usage in bivariate analyses, but were no longer significant in the multiple regression. Such multivariate analyses can be sensitive to multicollinearity, and the preregistered analysis's approach to attempt to mitigate multicollinearity again yielded gambling consumption as the most significant predictor of CSB usage. More complex statistical methods and larger samples should be used in order to better test this result. The strong association between gambling frequency and CSB usage is consistent with the argument made in the introduction that novice gamblers might start off with conventional sports betting products, before moving on to newer and more complex sports betting products as their level of gambling consumption increases. Frequent sports bettors do not appear to have learned (or contrastingly do not care) that the odds offered by CSBs can be far worse than that offered by conventional sports bets (Newall et al., 2019).

The present results provide one example of how the unique features of any new gambling product should be considered for potential impacts on harmful or problematic gambling before the product has been released on the market. Regulators and policy makers may wish to consider whether or not CSBs warrant additional customer protection measures among online sports bettors. Due to the wholesale way in which online gambling was

legalised in the UK, and because of the risk-based approach to regulation, the regulator only intervenes where the evidence suggests that a problem exists (Gambling Commission, 2017). However, it's useful to note that the UK is unusual in this regard. In other jurisdictions, products are legislated separately. In Australia, for example, a market which has many similarities with the UK in terms of product preferences and many of the same operators, online wagering on sports and racing is legal, although online in-play betting is banned, as are online casinos (Australian Government, 2001). The results are also relevant to other jurisdictions with less developed online sports betting markets, such as the US, where a recent Supreme Court ruling declared sports betting can be legally offered in any state (Supreme Court of the United States, 2017).

Further research could also address the present study's limitations. The present study was based on a crowdsourced sample who were willing to complete the survey for a relatively small amount of money. Participants had relatively high average levels of Problem Gambling Severity, which suggests that they may not be representative of the overall population of gamblers, and potentially not of CSB users in general. Other data collection methodologies, for example a study run with the assistance of an online sportsbook, could provide additional insights to the sample collected here.

As an initial inquiry, the present study measured engagement with all CSB products, whereas the significant correlations found might be driven by only some subtypes of CSB products. For example, 'build-a-bet' products on bookmakers' websites might drive the observed associations, rather than the 'request-a-bet' products on social media. Functionally, however, these products are almost identical and only differ in that build-a-bet products are more immediate (since they require no interaction with a human), whereas request-a-bet products potentially allow for more creativity in bet customization. This design choice was made because the present study relied on retrospective self-report data. We believed that

asking about each product type separately would make it harder for participants to recall their previous CSB usage and might therefore introduce excessive noise into their self-reports. Since we had reason to consider ‘build-a-bet’ and ‘request-a-bet’ products as functionally very similar with respect to bet customization, it was decided to simplify participants’ recall task in this way. A dataset containing objective measures of CSB usage may be best placed to address this limitation of the present research. Such a dataset could also study CSBs more fully within a sports bettor’s total behavior. For example, the number of different types of sports bets engaged in may best predict harmful outcomes, rather than the number of bets within any given category (LaPlante et al., 2014). Studies using objective measures of online gambling behavior have already yielded significant advances in other areas of gambling research (Braverman, LaPlante, Nelson, & Shaffer, 2013; LaPlante, Nelson, LaBrie, & Shaffer, 2012; LaPlante et al., 2014).

The present study did not find a significant correlation between the frequency of the last 12 month’s CSB usage and the illusion-of-control scale (Raylu & Oei, 2004). If these results are to be taken at face value, it appears that the illusion of control bias only affects whether CSBs are used at all, with other factors or biases influencing the frequency of CSB engagement. However, other possibilities should also be considered. The present study used only the illusion-of-control subscale from the wider Gambling Related Cognition Scale (Raylu & Oei, 2004). This is because other fallacious gambling cognitions, such as gambling expectancies or interpretive bias were thought by us to be less related to CSBs than the illusion of control. However, future research might want to consider whether other fallacious gambling cognitions can better predict CSB usage. Moreover, present gambling cognition instruments have been largely constructed for other gambling forms such as electronic gambling machines (Russell, Hing, & Browne, 2019) and may fail to capture the reality that there is an element of skill in sports betting (Leonard, Williams, & Vokey, 2015), as

demonstrated by (Kaunitz, Zhong, & Kreiner, 2017). These issues might be considered by looking at the individual scale items from the Raylu and Oei instrument. For example, the item ‘Specific numbers and colours can help increase my chances of winning’ appears to be most relevant to the non-skilled gambling game roulette. Whereas, an illusion of control in sports betting might be most strongly associated with a gambler’s engagement with the sport in question, as perhaps measured by their time spent discussing with other fans or gamblers on social media.

Conclusions

Adding to a growing literature on innovative gambling products (Dixon et al., 2018; Russell et al., 2019), the present results suggest that CSB products raise distinctive concerns around consumer protection for frequent sports bettors which deserve further investigation.

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Table 1. Participant characteristics.

Variable	Mean value (*N*=789)	CSB bettors (*N*=489)	Non-CSB bettors (N=300)
Problem Gambling Severity Index	3.17 (*SD* = 4.22)	3.70 (*SD* = 4.54)	2.31 (*SD* = 3.46)
Short Gambling Harm Screen	2.04 (*SD* = 2.67)	2.35 (*SD* = 2.82)	1.53 (*SD* = 2.32)
Consumption Screen for Problem Gambling	4.01 (*SD* = 3.02)	4.58 (*SD* = 3.11)	3.08 (*SD* = 2.61)
Gambling Cognitions Illusion of Control Scale	7.26 (*SD* = 4.80)	7.55 (*SD* = 4.93)	6.79 (*SD* = 4.55)
Age	35.40 (*SD* = 10.86)	34.28 (*SD* = 10.00)	37.22 (*SD* = 11.92)
Gender	32.7% female, 67.3% male	29.0% female, 71.0% male	38.7% female, 61.3% male
Education	12.2% secondary school, 35.0% college, 36.8% undergraduate degree, 16.1% postgraduate degree	11.9% secondary school, 33.5% college, 38.9% undergraduate degree, 15.8% postgraduate degree	12.7% secondary school, 37.3% college, 33.3% undergraduate degree, 16.7% postgraduate degree
Occupation	10.0% student, 79.0% in work, 5.3% unemployed, 2.3% retired, 3.4% other	10.2% student, 80.6% in work, 4.7% unemployed, 1.4% retired, 3.1% other	9.7% student, 76.3% in work, 6.3% unemployed, 3.7% retired, 4.0% other

Note: Problem Gambling Severity Index consists of nine items, and gives a score between 0 and 27. Problem gamblers are those scoring 8 or higher on this measure. The Short Gambling Harm Screen consists of ten binary-scored items. Consumption Screen for Problem Gambling scores vary between 0 and 13. The Gambling Cognitions Illusion of Control scale adds the scores from four items, each scored on a 1-7 scale.

Table 2. Correlations between the measures of CSB usage and the individual difference measures.

Variable	Custom binary	Problem Gambling Severity Index	Short Gambling Harm Screen	Consumption Screen for Problem Gambling	Illusion of Control Scale
Custom continuous	1	.270 ($p < .001$)	.251 ($p < .001$)	.361 ($p < .001$)	.040 ($p = .261$)
Problem Gambling Severity Index	.160 ($p < .001$)	1	.822 ($p < .001$)	.553 ($p < .001$)	.232 ($p < .001$)
Short Gambling Harm Screen	.150 ($p < .001$)	.822 ($p < .001$)	1	.473 ($p < .001$)	.161 ($p < .001$)
Consumption Screen for Problem Gambling	.241 ($p < .001$)	.553 ($p < .001$)	.473 ($p < .001$)	1	.088 ($p = .013$)
Illusion of Control Scale	.077 ($p = .031$)	.232 ($p < .001$)	.161 ($p < .001$)	.088 ($p = .013$)	1

Note: The measure of binary usage (whether the participant had ever used a CSB) are shown in the first column under “Custom binary”. Correlations involving the continuous measure of CSB usage (reported fraction of days in the last year that a CSB was used) are shown in the first row next to “Custom continuous”.

Table 3. Logistic regression output.

Variable	Statistic	Model 1	Model 2
Constant	*OR*	0.660	1.573
	p	.016	.314
	95% CI	[0.471, 0.924]	[0.652, 3.800]
Problem Gambling Severity Index	*OR*	1.000	0.987
	p	0.999	.737
	95% CI	[0.928, 1.077]	[0.915, 1.065]
Short Gambling Harm Screen	*OR*	1.036	1.017
	p	0.503	.751
	95% CI	[0.934, 1.148]	[0.916, 1.129]
Consumption Screen for Problem Gambling	*OR*	1.193	1.227
	p	< .001	<.001
	95% CI	[1.115, 1.276]	[1.142, 1.318]
Illusion of Control Scale	*OR*	1.025	1.026
	p	.147	.138
	95% CI	[0.991, 1.060]	[0.992, 1.062]
Age	*OR*		0.969
	p		<.001
	95% CI		[0.953, 0.985]
Gender (baseline = female)	*OR*		1.483
	p		.019
	95% CI		[1.067, 2.063]
Education (baseline = secondary school)			
college	*OR*		0.875
	p		.618
	95% CI		[0.518, 1.478]
undergraduate degree	*OR*		1.161
	p		.577
	95% CI		[0.687, 1.963]
postgraduate degree	*OR*		1.036
	p		.907
	95% CI		[0.572, 1.877]
Occupation (baseline = in work)			
student	*OR*		0.731
	p		.273
	95% CI		[0.417, 1.281]
employed	*OR*		0.687
	p		.284
	95% CI		[0.346, 1.365]
retired	*OR*		0.643
	p		.422
	95% CI		[0.219, 1.887]
other	*OR*		1.037
	p		.933
	95% CI		[0.448, 2.398]

Note: Predictions of whether a given participant has ever used a custom sports betting product. Model 1 contains the four gambling screens. Model 2 adds the demographics.