

Sport in the Context of Sports Betting and Gambling from the Perspective of University Students: Case of the Czech Republic

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BACKGROUND: The sports sector with all its aspects has become an inseparable part of modern society and its influence is manifested in both, local and global, aspects of the life in every country. Not only does sport create and promote friendship, team play, regardless of gender, age, education, religion, ethnicity, social status, etc., but it is also associated with numerous undesirable consequences.

AIM: The primary objective of the research paper at hand was to examine the correlation between the amount invested in sports betting, as a form of gambling, and selected characteristics of university students in the Czech Republic. **METHODS:** Various scientific methods, including analysis, synthesis, induction, and deduction, were employed in the preparation of the research article. Additionally, selected key databases such as the citation and reference database Scopus and the bibliographic and citation database WOS. The study comprised university students from the Czech Republic. The

first group included 391 participants with prior experience in sports betting, while the second group comprised 679 respondents who had no previous exposure to sports betting. **RESULTS:** The results confirm the dependence between the amount invested in sports betting, as a category of gambling, and one's biological age, as well as gender or the type of faculty the respondent studies. Furthermore, the results in relation to sports betting confirm its dependence on the respondent's relationship to sports. **CONCLUSIONS:** The most common betting platform (bookmaker) preferred by university students in the Czech Republic for sports betting is an online or internet betting agency.

Keywords | Czech Republic – Gambling – Sport – Sports Betting – University Students

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1 INTRODUCTION

In the 21st century, sport is unequivocally recognized as a captivating, dynamic, and lucrative domain. The sports industry annually generates substantial revenues and profits, not only from sporting events such as competitions, matches, and Olympic Games but also from the realm of gambling and sports betting on various sports events. Additionally, the commercialisation and professionalisation of sports contribute to the proliferation of hazardous gambling, betting, and gaming within the sports domain (Li et al., 2012).

As asserted by Abarbanel et al. (2016), Parke et al. (2016), and Rose and Owens (2009), legal definitions of gambling and gaming exhibit subtle differences across jurisdictions, although the fundamental definitions remain relatively consistent. Gambling activities involve a certain initial monetary deposit or wager. The outcome, primarily or entirely determined by chance, in the case of a positive outcome results in a prize (monetary value) awarded to the successful participant in gambling.

Gambling and gaming prevail among university students, yet this demographic often downplays it as a risky behaviour. University students perceive gambling and gaming as socially acceptable forms of recreation and relaxation, considered less harmful and more accessible than, for instance, alcohol consumption or substance abuse. University students represent an adult population undergoing a critical developmental period marked by extensive self-exploration and the development of personal interests (Arnett, 2000; Engwall et al., 2004; Stinchfield et al., 2006; Wickwire et al., 2007).

As consistently argued by Kam et al. (2017), Moore et al. (2013), and Wong et al. (2022), with the expansion of gambling possibilities and opportunities, problematic gambling among university students has become a global public health concern.

Betting on sports events such as matches, races, or even the Olympic Games has become a rather lucrative and widely accepted activity worldwide (Etuk et al., 2022).

Vermillion and Leivian (2013) report that, in the early 21st century, sports betting as a manifestation of gambling behaviour was brought under control on college campuses. They further highlight the existence of programmes by the National Collegiate Athletic Association in the United States and Canada aimed at educating university students about the dangers and illegality of sports gambling that could lead to hazardous dependencies.

In this context, Stuhldreher et al. (2007) assert that gambling and gaming, not only within the domain of the sports industry, pose a significant health threat, especially among university students, due to their broad and serious negative impacts.

Engwall et al. (2004) claim that university students actively engaged in sports seek sports gambling more frequently than non-sporting students. They argue that student athletes, particularly in larger cities, have more contacts and consequently more opportunities for sports gambling activities. It is also evident in this context that university student athletes exhibit

a higher level of dependence on gambling and sports betting than non-sporting university students.

Gambling and gaming have numerous serious and adverse effects, including financial, relational, emotional, psychological, health-related, occupational, academic, and cultural consequences. These impacts can lead to the development of hazardous dependencies and the involvement of individuals in criminal activities. Moreover, these undesirable effects create societal inequalities. Public health attitudes to gambling and gaming issues, concerning prevention and treatment of gambling problems, primarily emphasize harm minimization. Therefore, it is crucial to raise awareness about the associations of socio-demographic and socioeconomic factors related to excessive gambling and gaming (Abbott et al., 2014; Browne et al., 2016; Langham et al., 2015; Messerlian & Derevensky, 2005).

Since 1st January, 2017, the issue of gambling in the Czech Republic has been addressed through Act No. 186/2016 Coll., the Gambling Act (Lottery Act), regulating gambling, conditions for its operation, and the jurisdiction of administrative authorities in the field of gambling. The state administration bodies in the field of gambling in the Czech Republic include: (a) the Ministry of Finance of the Czech Republic; (b) municipal authorities; (c) the Customs Administration of the Czech Republic.

This research paper focuses on issues related to sports in the context of sports betting and gambling from the perspective of university students studying in full-time and combined forms of study in the Czech Republic. It is clear that the relationship between sports and betting, or gambling in general, appears relatively close. However, empirical or practical evidence mapping and explaining these relationships in relation to various categories of the human population currently demonstrate insufficient research exploration. Therefore, the primary aim of this research article is to determine the dependence between the amount invested in sports betting, as a category of gambling, and selected characteristics of university students in the Czech Republic. The article also outlines specific objectives, including (a) determining the extent to which active participation in sports influences individuals to engage in sports betting as a form of gambling; (b) identifying the most commonly preferred betting platform (bookmaker) for sports betting, as a category of gambling, in the Czech Republic. The research paper follows a standard structure, presenting theoretical foundations, research objectives, methodology, and research data, followed by the presentation of primary research findings, data, information, facts, including a discussion of these research findings. The conclusion of the research article contains a concise summary.

2 THEORETICAL BACKGROUND

Over the past decades, sports, sporting activities, the sports industry, and the sports sector as a whole have experienced a significant boom, becoming a globally recognised and influential societal phenomenon (Blanco García & Burillo, 2018). As further emphasized by Li et al. (2012), sports activities and the sports industry are in the spotlight due to the significant number of financial opportunities and possibilities, successfully

created by this sector. Cooper et al. (2022) add that the widespread use of technology, changing societal perceptions, values, and attitudes, along with the liberalisation of government regulations, propel sports, the sports industry, and the entire sports sector into a transformative dimension.

Koning and van Velzen (2009) present the indisputable fact that sports and the sports industry have been, and will continue to be strongly and closely linked to the realm of gambling, casino gaming, and sports betting. Oyebisi et al. (2012) further assert that sports betting, in its current form, represents a popular form of gambling. However, as argued by Molinaro et al. (2014) and Volberg et al. (2010), issues related to gambling, gambling games and sports betting are pressing and debated issues in the public health domain across several European states. Abarbanel et al. (2016) and Derevensky (2012) highlight the rapid global expansion of gambling and gambling games opportunities, in the sports industry and other areas, and the increasing normalisation of gambling and gaming, particularly with the continuous growth of advertising and the development of new platforms.

Moore et al. (2013) posit that hazardous and problematic gambling in any form or activity poses a serious problem in most Western societies or cultures. As stated by Wickwire et al. (2007), today's university students have grown up in a culture where gambling and gambling games are increasingly accessible, acceptable, enticing, and romanticised. According to them, university students perceive activities such as betting, scratch-off lottery tickets, or cigarettes as significantly more accessible than purchasing alcoholic beverages, drugs, or other addictive substances. In this context, Rinker et al. (2016) add that university students may have the time, resources, and proximity to engage in gambling or gaming activities such as sports betting, card games, online gambling, lotteries, casinos, and the like. Abarbanel et al. (2016) further state that young adults are a relatively easily influenced group towards various forms of gambling and gaming. Therefore, advertising for gambling and various forms of gaming includes messages that appeal to young adults through colours, images of young adults, various sports activities, references to popular culture, and associations with Las Vegas. For this reason, they appeal for companies operating in the gambling and gaming industry to recognize the potential negative impact and harmfulness of these advertisements and, in general, adopt corporate social responsibility standards. This includes incorporating warning messages into advertisements related to gambling and ensuring that marketing communications do not encourage excessive gambling and gaming.

As highlighted by Vermillion and Leivian (2013), gambling and gambling games have a strong connection and a positive relationship with sports and various sporting events such as the Olympics or different sports competitions, races, and matches. Several researchers explore the sociodemographic and socioeconomic determinants and characteristics in the context of gambling and gaming, including Davidson et al. (2016), McCormack et al. (2014), Tan et al. (2010), Worthington et al. (2003), and others. The sociodemographic and socioeconomic determinants in the context of gambling and gaming in university students are investigated by Engwall et al. (2004), Chan et al. (2015), Kam et al. (2017), Rinker et al. (2016), Stinchfield

et al. (2006), Vermillion and Leivian (2013), Wickwire et al. (2007), Wong et al. (2022), and others.

Cooper et al. (2022), and Engwall et al. (2004) offer an interesting perspective on sports betting, gambling, and gaming. They analyse behaviour patterns in the context of sports betting and gambling concerning an individual's attitude toward sports, i.e., whether the individual is an active sportsperson or not. Cooper et al. (2022) claim that the amount invested in sports betting by active sportspeople reaches higher values than that of non-sportspersons. In contrast, Engwall et al. (2004) state that college student-athletes gamble more frequently than college student non-athletes.

In this context, for example, McCormack et al. (2014) argue that gambling and gambling games were historically considered exclusively male activities. Recent prevalence surveys, however, have shown an increasing involvement of women in gambling. Nevertheless, with the development of information and communication technologies and social media platforms, online gamblers are likely to be predominantly male. Men and women engage in gambling activities for different reasons and prefer different gambling activities, ranging from scratch cards and slot machines to sports betting on various sports events, and frequenting casinos.

Appiah and Awuah (2016), and King et al. (2010) discuss the proliferation of information and communication technologies, the internet, social networks, and media in relation to the development of sports betting and gambling. These researchers argue that online gambling is particularly appealing and internally motivating for young generations due to its 24/7 accessibility and speed, allowing individuals to place bets anytime and anywhere.

Worthington et al. (2003) claim that the amount invested in a particular form of gambling and sports betting is related to higher income individuals or households. They further state that, for example, young families may have higher expenditures on gambling products that can be consumed at home, such as scratch lottery tickets or betting on various activities.

Tan et al. (2010) suggest that the behavioural and decision-making patterns of an individual and population in the context of gambling and gambling games are influenced by social status, religion, ethnicity, the amount invested, education, and the biological age of the individual. The influence of social status is also discussed by Davidson et al. (2016). On the other hand, Rinker et al. (2016) talk about the historical origin, roots, racial and ethnic differences in the context of gambling and gaming.

In the context of addictive behaviour, gambling, and gaming, Rinker et al. (2016) argue that college students represent the segment of population with a high risk of developing addictive gambling behaviour and with an increasing need for financial resources.

On the contrary, Chan et al. (2015) present the fact that many college students engage in gambling as a recreational or occasional activity. However, their active and regular involvement in gambling could potentially develop into problematic gambling, negatively impacting the health of college students.

It can be argued that the current empirical and scientific understanding of sports in the context of sports betting and gambling exhibits a research gap and insufficient scientific exploration and understanding concerning the behaviour and mindset of selected population segments. Nevertheless, the area of gambling and gaming is legally anchored in the Czech Republic by the Gambling Act (Lottery Act), Act No. 186/2016 Coll. The operation of gambling games is overseen by the Ministry of Finance of the Czech Republic.

3 RESEARCH OBJECTIVE, METHODOLOGY AND DATA

This research paper delves into the sports in the contexts of gambling, gaming, and sports betting. Currently, sports are perceived as activities that are integral to the lives of individuals, whether at a casual, amateur, or professional level.

However, approaches to sports, the sports sector, and the sports industry vary. Sports, as an independent category, can evoke positive and acceptable associations, particularly in connection with relatively rapid acquisition of financial resources through promotion, advertising, sponsorship, and also through sports betting, gambling, and games of chance. Various sporting events (Olympic Games, sports competitions, matches, and contests) and their increasing popularity can thus become an intrinsic motivator for individuals, whether in connection with actively supporting their sports team or club, engaging in sports fandom, or even in the context of sports betting or other forms of gambling.

Various research studies, analyses, surveys, and inquiries highlight the fact that university students constitute a considerable segment of the population to which issues related to gambling, gaming, and sports betting may be relevant. These activities are perceived by students as an acceptable means of recreation or thrill seeking.

This research article seeks to uncover whether active engagement in sports influences individuals to participate in sports betting, a category of gambling. It also explores the relationship between the amount invested in sports betting and selected characteristics of the student population. The research results presented in this article represent only partial findings as they are part of a comprehensive research study conducted among university students in the Czech Republic. Due to the necessity of acquiring primary data and information related to decision-making and actions of university students, as well as understanding their behaviour that may lead to dangerous dependencies, and considering the severity of this issue, the authors of the research article state that they do not endorse, communicate, incite, or in any other way support the field of gambling, gaming, or sports betting in any manner.

In the context of this research, Mao et al. (2015) assert that despite the growing interest in sports betting and various types of sports lotteries, current scientific knowledge in this field lacks sufficient empirical evidence.

The main objective of this research article was to determine the correlation between the amount invested in sports betting, as a form of gambling, and selected characteristics of university students in the Czech Republic. The specific objectives of the research were: (a) to ascertain the extent to which active participation in sports influences individuals to engage in sports betting, as a form of gambling; (b) to determine the most common betting platform preferred for sports betting, as a form of gambling, in the Czech Republic. The comprehensive research study was conducted among university students studying in full-time and part-time programmes in the Czech Republic.

To achieve the defined main and specific research objectives and to better understand the relationships between the observed variables, the following research questions were formulated:

Research question 1: Is there a statistically significant correlation between the amount invested in sports betting, as a form of gambling, and the biological age of respondents?

Research question 2: Is there a statistically significant correlation between the amount invested in sports betting, as a form of gambling, and the gender of respondents?

Research question 3: Is there a statistically significant correlation between the amount invested in sports betting, as a form of gambling, and the type of faculty that the respondent is currently studying?

Research question 4: Is there a statistically significant correlation between the experience (participation) of the surveyed respondents in sports betting, as a form of gambling, and the respondent's status in relation to sports (sportsperson, non-sportsperson)?

Research question 5: What is the most common betting platform (bookmaker) preferred by respondents for sports betting, as a form of gambling, in the Czech Republic?

The primary research was conducted using an anonymous structured questionnaire, which took an online form and was divided into several sections logically and conceptually linked. Participation in the research study was entirely voluntary. At the beginning of the research study, respondents were warned about the long-term negative consequences and impacts on human health associated with gambling and sports betting, such as the development of dangerous addiction. However, it is essential to highlight that in the Czech Republic, the issues of sports betting and games of chance are regulated in accordance with the current legislation through the Law on Gambling (Lottery Law), namely Law No. 186/2016 Coll.

The research study comprised two research phases. The first phase took place from January 2023 to March 2023, and the second phase from mid-March 2023 to July 2023. An integral part of the primary research study was a pre-test, which was paper-based and was completed by eight respondents from the ranks of university students studying in the Czech Republic. These respondents also had a previous experience in the field of sports betting. After completing the pre-test, the students

were asked to share the questionnaire survey through online forms among their fellow students studying at universities in the Czech Republic who also may have experience with sports betting, according to the pre-test participants. The respondent's status in relation to sports was examined on a two-point decision and evaluation scale, namely (a) sportsperson; (b) non-sportsperson. The term non-sportsperson was verbally explained to the respondents in the structured questionnaire survey as a term used for a respondent who is not involved in any sport, whether at a casual, amateur, or professional level. In contrast, the term sportsperson was perceived at any of the following levels: recreational, competitive, or professional. The total invested monthly amount in sports betting, as a form of gambling, was analysed using the interval distribution of this total monthly amount, namely (a) CZK 0–5,000; (b) CZK 5,001–10,000; (c) CZK 10,001–20,000; (d) CZK 20,001 and more.

For the purpose of subsequent verification or answering of the defined research questions, the research sample of respondents comprised two groups. Research group one comprised 391 university students studying in the Czech Republic who, at the time of the research study, had experience with or participated in sports betting. Research group two comprised 679 university students studying in the Czech Republic who, at the time of the research study, had no previous experience with or had not participated in sports betting. During the verification process and the exploration of the defined research questions, analysis was conducted on both research groups. The validation of the research questions was achieved through the application of Pearson's chi-square test. This test determines the existence of a correlation between the selected statistical variables. The analysis of the primary research data was performed using the Microsoft Excel 2013 spreadsheet processor and the IBM SPSS Statistics 23 statistical software.

4 RESULTS AND DISCUSSION

The table (*Table 1*) specifies the structure of addressed respondents, university students studying in the Czech Republic, who participated in a research survey focused on the area of gambling and sports betting and already have experience with these activities.

Based on Table 1, it can be stated that 32.74% of university students aged 18 to 22 years, with experience with gambling and sports betting, participated in the research on gambling. The second significant group (27.88%), consisted of university students studying in the Czech Republic, aged 23 to 27 years, actively involved in gambling and sports betting. The smallest research sample in terms of biological age comprised university students in the Czech Republic aged 48 and above, consisting of 8 respondents, i.e., 2.05%. A total of 101 women (25.83%) and 288 men (73.66%) participated in the research.

As further demonstrated in Table 1, the representation of studied faculties among university students in the Czech Republic varied. Based on another criterion examining the respondent's status in relation to sports, the overall percentage of university students in the Czech Republic with active experience in gambling and sports betting, who considered themselves sportspersons according to the decision and evaluation scale, was 62.92%. In contrast, non-sportspersons constituted 37.08%.

Research question 1: Is there a statistically significant correlation between the amount invested in sports betting, as a form of gambling, and the biological age of respondents?

Research question 1 was verified through the Pearson chi-square test. The result confirmed a statistically significant correlation between the amount invested in sports betting, as a category of gambling, and the biological age of respondents, as evidenced by a p-value of 0.000 ($X^2 = 163.461$, $df = 18$, $p < .05$). To assess the strength of this correlation, Cramer's V was employed, yielding a value of 0.677, signifying a robust relationship.

Research question 2: Is there a statistically significant correlation between the amount invested in sports betting, as a form of gambling, and the gender of respondents?

In order to verify Research question 2, the Pearson's chi-square test was applied. The research indicated a p-value lower than the standard level of significance (5%). Thus, it can be concluded that there is a statistically significant correlation between the amount invested in sports betting, as a category of gambling, and the gender of respondents ($X^2 = 39.286$, $df = 6$, $p < .05$). The strength of the observed correlation was examined using Cramer's V, resulting in a value of 0.138, indicating a weak relationship.

Research question 3: Is there a statistically significant correlation between the amount invested in sports betting, as a form of gambling, and the type of faculty that the respondent is currently studying?

The verification of Research question 3 utilized the Pearson's chi-square test, yielding a p-value of 0.000. This finding suggests a statistically significant correlation between the amount invested in sports betting, as a category of gambling, and the type of faculty the respondent is currently studying ($X^2 = 86.245$, $df = 34$, $p < .05$). The strength of this observed correlation, tested with Cramer's V, was 0.117, indicating a weak relationship.

Research question 4: Is there a statistically significant correlation between the experience (participation) of the surveyed respondents in sports betting, as a form of gambling, and the respondent's status in relation to sports (sportsperson, non-sportsperson)?

Research Question 4 was verified using the Pearson's chi-square test. The obtained data indicated a p-value lower than the standard level of significance ($p = 0.002$). Therefore, it can be concluded that there is a statistically significant correlation between the experience (participation) of the respondents in sports betting, as a category of gambling, and the respondent's status in relation to sports (sportsperson, non-sportsperson). The verification of this research question can be interpreted as $X^2 = 9.236$, $df = 1$, $p < .05$. The strength of the observed correlation, tested using Cramer's V, was 0.093, suggesting a weak relationship.

Research question 5: What is the most common betting platform (bookmaker) preferred by respondents for sports betting, as a form of gambling, in the Czech Republic?

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Table 1 | Structure of addressed respondents

Biological age	Absolute frequency	Relative frequency
18–22	128	32,74%
23–27	109	27,88%
28–32	91	23,27%
33–37	28	7,16%
38–42	13	3,32%
43–47	14	3,58%
48 plus	8	2,05%
Total	391	100,00%
Gender	Absolute frequency	Relative frequency
Female	101	25,83%
Male	288	73,66%
Other	2	0,51%
Total	391	100,00%
Type of faculty studied	Absolute frequency	Relative frequency
Applied Informatics, Informatics and Management	11	2,81%
Architecture, Art and Architecture	9	2,30%
Security Management of the Police Academy of the Czech Republic in Prague	8	2,05%
Jan Perner Transport Faculty	11	2,81%
Economics, Economics and Administration, Social and Economic Studies, Business and Management	29	7,42%
Electrical Engineering, Technology, Material Technology	6	1,53%
Pharmacy	14	3,58%
Philosophy/Faculty of Arts	9	2,30%
Mining and Geology	7	1,79%
Music and Dance, Theatre, Film and Television	14	3,58%
Humanities	19	4,86%
Chemical, Chemical technology	11	2,81%
Medicine	9	2,30%
Forestry and wood technology	8	2,05%
Logistics and crisis management, security engineering	5	1,28%
Mathematics and Physics	9	2,30%
International relations	21	5,37%
Multimedia communications, design and art, visual arts	6	1,53%
National economics, business economics, finance and accounting	25	6,39%
Others	10	2,56%
Teaching	12	3,07%
Law	15	3,84%
Science	8	2,05%
Restoration	4	1,02%
Fisheries and water protection	7	1,79%
Social sciences, social studies	4	1,02%
Civil engineering	9	2,30%
Mechanical engineering	15	3,84%
Physical education and sports, sports studies, physical culture	14	3,58%
Textile engineering	11	2,81%
Veterinary medicine, veterinary hygiene and ecology, environment	13	3,32%
Military leadership, military technologies	8	2,05%
Horticulture	6	1,53%
Healthcare Sciences, Health and Social, Health Studies	13	3,32%
Agriculture, Agri Sciences	11	2,81%
Total	391	100,00%
Attitude to sport	Absolute frequency	Relative frequency
Sportsperson	246	62,92%
Non-sportsperson	145	37,08%
Total	391	100,00%

Research Question 5 aimed to discover the most frequently used betting platform, i.e., the bookmaker, preferred by university students for sports betting, as a category of gambling, in the Czech Republic. A bookmaker represents a specific individual or organization that analyses, adjusts, and sets individual betting odds for bets, accepts wagers (invested amounts), and ultimately pays out winnings. Bookmakers are divided into licensed (operating within a betting office) and unlicensed or illegal ones (following sports events, offering and accepting bets, and paying out winnings in case of a win).

The literature reviewed within this research article presents various options of betting platforms (bookmakers). However, during the pre-test, the initial stage of our research survey, it was found that these options were not easily understandable and subsequently sparked discussion regarding the terminology used for the given betting platform options. Therefore, the possibilities for the Czech Republic were reduced to the following: (a) brick-and-mortar betting office (physical branch and physical location of the betting office); (b) through a personal bookmaker representing a specific individual or individuals; (c) online or internet-based betting office (internet and other online alternatives or possibilities; mobile betting through smartphones).

The table below (*Table 2*) illustrates the most common betting platforms (bookmakers) preferred by university students for sports betting, as a category of gambling, in the Czech Republic. Within the research survey conducted through an anonymous structured questionnaire, students were allowed to select only one response option in the context of this finding. In this case, it was a single-choice question in the framework of our primary research survey.

Based on the presented table (Table 2), it can be stated that the most common betting platform (bookmaker) preferred by respondents for sports betting, as a category of gambling, in the Czech Republic is an online or internet betting office (internet and other online alternatives or options; mobile betting via smartphones). This response option was chosen by a total of 348 respondents, or 89.0%. This fact is understandable for several reasons: (a) 24/7 access, i.e., from anywhere and anytime; (b) clarity, easy and simple control through a smartphone, tablet, or computer, including optimisation for such modern devices; (c) speed of placing the invested amount (bets). In this context, it is also evident that an online or internet betting office is suitable, especially for live sports betting directly while watching sports matches.

This research article aims to enrich the current knowledge or provide new empirical evidence and perspectives on the intersection of sports, gambling, and sports betting through its main and partial objectives. These new findings, deepening and developing information, data, and facts were obtained through research surveys conducted among university students studying in the Czech Republic.

Our primary information, facts, data, results, and conclusions indicate a statistically significant correlation between the invested amount in sports betting, as a category of gambling, and the following researched attributes: (a) biological age of respondents; (b) gender of respondents; (c) type of faculty the

Table 2 | Possible betting platforms preferred by university students for sports betting

Possible betting platforms preferred by university students for sports betting	Absolute frequency	Relative frequency
Online or internet betting agencies	348	89,00%
Retail betting (physical betting agency)	42	10,74%
Through a bookmaker	1	0,26%
Total	391	100,00%

respondent is currently studying. Furthermore, our research surveys revealed a correlation between the experience (participation) of the surveyed sample in sports betting, as a category of gambling, and the respondent's status in relation to sports (sportsperson, non-sportsperson). However, it can be stated that, in our case, it is a weak relationship. Finally, the last finding of our research survey is the conclusion that the most common betting platform (bookmaker) preferred by respondents for sports betting, as a category of gambling, in the Czech Republic is an online or internet betting office (internet and other online alternatives or options; mobile betting via smartphones).

Vermillion and Leivian (2013) focused their research on the sports gambling behaviour of American college students, both active and non-active in sports. Their results revealed that more college students who were non-sportspersons have experience with sports betting and sports gambling activities. However, they also found that there were no significant differences in gambling behaviour between these two groups. The findings of these researchers partially support the conclusions from our conducted research.

The conclusions of our research regarding gender are also confirmed in the study by Castrén et al. (2018), who also found that the gender (women versus men) of individuals is significantly related to spending on gambling. According to them, male gender is more associated with weekly and monthly expenditures on gambling than is the case with women. They further argue that the Finnish population with lower income spends proportionally more of their income on gambling compared to the population with average and high incomes.

Other empirical study, such as by McCormack et al. (2014), also confirms that women, on average, spend far less financial resources on various types of gambling than men. They also claim that more men participate in online gambling than women. This fact is also confirmed by our research surveys, where the representation of women in our studies was only 25.83% of the total number of survey participants.

Tan et al. (2010) conclude from their studies that there is a statistically significant correlation between the biological age and spending on gambling and gambling activities. In this context, they further argue that expenditures in the area of gambling tend to increase with biological age. However, Mikesell (1991) argues in this context that the inner motivation and interest of an individual in various types of gambling decrease after the age of 44.

Davidson et al. (2016) and Worthington et al. (2003) present, through their research surveys, the fact that there is a correlation between the invested amount in gambling and education and also social status. These research findings also support our research findings, as we also revealed these dependencies. Davidson et al. (2016) and Worthington et al. (2003) further argue that the amount invested in gambling increases with decreasing levels of education and increasing unemployment rates. A lower social status of an individual is accompanied by increased participation in gambling and higher expenditures on gambling activities. Giroux et al. (2012) add that individuals addicted to gambling and gambling activities have a lower net annual income than individuals not addicted to gambling.

Based on the research surveys from Hing et al. (2015); Quilty et al. (2014) or Young and Stevens (2009), it can be argued that there are proven dependencies between the amount invested in gambling and the frequency of betting; the type of betting game or betting activity; or addiction to gambling. This again supports some of our research findings focused on the area of sports betting and gambling.

On the other hand, for example, Rinker et al. (2016) examined the relationship between the amount invested in gambling and selected sociodemographic and socioeconomic determinants or characteristics of college students, especially ethnic and racial differences. Their results suggest that Asian college students may be a high-risk subgroup of college gamblers, and that there is a critical need for targeted interventions for this part of the population.

Gray et al. (2015) found in their research that the typical Icelander bets approximately three days a month and makes fewer than two bets on a gambling day, each valued at about \$4. In contrast, our results show that the value of the invested amount in sports betting or gambling ranges from CZK 0 to 5000 per month. This fact was confirmed by 60.87% of the respondents who participated in our research surveys. In this context, the findings of Shen et al. (2015) are also interesting, as they, among other things, talk about two categories of individuals with gambling problems, such as various types of betting activities. They refer to these categories as problem gamblers and moderate-risk gamblers. The results of their research provide the median invested amount of problem gamblers, which is more than fourteen times higher than that of moderate-risk gamblers (USD 850.0 compared to USD 57.5). The differences in monthly expenditures between moderate-risk gamblers, according to their research, range from USD 2 to over USD 60,000, while for problem gamblers, spending ranged from USD 1 to USD 20,000. They further present the following findings. Problem gamblers more often invest higher amounts in gambling. Moreover, they face greater debt than moderate-risk gamblers. The researchers also mention the limitation of their research, which lies in the fact that the net household income of the individual was not known. This limitation represents an important constraint, given that, for example, college students may be financially supported by their parents or may live with them in a common household. Kam et al. (2017) also analysed gambling behaviour among college and university students in Macau in their research, and in connection with the amount

spent on gambling, they found that on average, gamblers (college students) bet MOP 411 dollars per month on gambling. The highest reported deposit was MOP 10,000 dollars.

Research surveys by Chan et al. (2015) also claim that especially Asian Americans belong among the high-risk group of college students in connection with gambling and gambling, unlike white American students. Studies by Rinker et al. (2016) provide additional interesting findings in the context of the invested amount. They claim that Asian students gamble less often but lose more money than other racial and ethnic groups of students. This finding may be an inspiration for further research initiatives or enrichment of empirical surveys in this area. Kairouz et al. (2015) suggest in their research survey that the amount invested by college students depends on whether college students gamble on weekdays or weekends and also how many people they gamble with.

Hing et al. (2015), in their research, also examined the most preferred betting platforms for sports betting. The results of their surveys present the fact that a total of 57.0% of sports bets took place over the internet, 35.6% at physical locations, and 7.4% by phone. Overall, 38.4% of all bets were closed before the match day, and 39.7% at least one hour before the start of the sports match. Participants in their surveys stated that 61.5% of sports bets were researched and planned before the sports match, while 30.3% were closed impulsively before the start of the sports match. Only 8.5% of sports bets were closed impulsively during the sports match. These findings also support our presented conclusions that the most common betting platform (bookmaker) used by participants in our research surveys was an online betting office.

Gainsbury (2015) and Wood and Williams (2010) also addressed the issue of betting platforms used for betting in their surveys. Their results show that overall spending on betting is higher online than at physical locations.

According to the survey by Montes and Weatherly (2017), it can be argued that the preferred betting platform (bookmaker) is physical locations because, according to their survey, only one in four college students utilized the option to bet through an online platform. Such conclusions contradict our research findings as the preference for a physical betting office by university students studying in the Czech Republic was only 10.74%.

5 CONCLUSIONS

Sport is an inherent part of every culture, both past and present, and likely future. It is evident that sports take many forms and continually evolve based on social norms, trends, and new directions. As Li et al. (2012) and Nauright and Pope (2017) assert, sports in the 21st century represent a massive global phenomenon with both positive and negative consequences or impacts on individuals, sports clubs or teams, and essentially on the society as a whole, and by extension, on a given country.

This research paper focuses on sports in the context of sports betting and gambling from the perspective of university stu-

dents studying in the Czech Republic. The interconnection between the sports industry and gambling is presented by many researchers, such as Koning and van Velzen (2009) or Oyebisi et al. (2012), among others. Other perspectives on this research issue are presented by Abarbanel et al. (2016), Chan et al. (2015), or Kam et al. (2017), who argue that young adults, including university students, are a relatively vulnerable group in terms of various forms of gambling.

The main objective of this research article was to identify the relationship between the amount invested in sports betting, as a category of gambling, and the selected characteristics of university students in the Czech Republic. These characteristics included biological age, gender, and the type of faculty the student is currently studying. Other objectives included determining the extent to which active sports participation influences individuals to engage in sports betting, and determining the most common betting platform (bookmaker) preferred by university students studying in the Czech Republic for sports betting, as a category of gambling.

Having processed the theoretical background focused on sports in the context of sports betting and gambling, research questions were formulated. A total of five research questions were established. The results of our research survey found a statistically significant correlation between the amount invested in sports betting, as a category of gambling, and all the examined characteristics: the biological age of the respondents, the gender of the respondents, and the type of the faculty that the respondents are currently studying. Furthermore, our research surveys revealed a correlation between the experience (participation) of the respondents in sports betting, as a category of gambling, and the respondent's status in relation to sports (sportsperson or non-sportsperson). Our final finding is that the most common betting platform (bookmaker) preferred by university students for sports betting, as a category of gambling, in the Czech Republic is online or internet-based betting offices (internet and other online alternatives or options; mobile betting via smartphones).

While processing the basic theoretical foundations related to the issue of sports in the context of sports betting and gambling, and in the subsequent discussion of our findings, insufficient scientific knowledge and exploration by other researchers, especially concerning behaviour and ways of thinking in the selected segments of the population in the Czech Republic, were discovered. The results of our research survey bring new facts to the field of sports betting and gambling from the perspective of university students, confirming the originality, value, and contribution not only of this research article but also of our entire research survey.

However, even though this is the first systematic research survey focused on the issue of sports in the context of sports betting and gambling among university students studying in the Czech Republic, it is necessary to note that several limitations, not only of this research article but of our entire research survey were detected. Our research sample consisted only of university students studying in the Czech Republic. Therefore, it is unknown whether the results would apply to other university students. Furthermore, our entire research survey used our own anonymous structured questionnaire. However, this questionnaire was constructed based on processed theoretical foundations related to the issue of sports in the context of sports betting and gambling. Another limitation is the fact that quantitative research could have been complemented by qualitative research. This could have increased the research sample or help better explain and interpret some research attributes or categories, providing input data for further research surveys. Our final limitation is the duration of the research survey. In terms of time, the research survey could have taken longer. Despite these limitations, it can be argued that this research article interprets new findings and ideas, for the future research surveys to consider or further develop, particularly in the context of combating dangerous gambling addiction among the populations.

As Wong et al. (2022) assert in this context, problematic gambling and any form of gambling among university students should be addressed in a proactive and effective manner. To prevent harm associated with gambling problems among university students, it would be appropriate and desirable to increase resources for gambling and gaming research, improve educational, preventive, and counselling services at universities and college campuses.

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