



Gambling Patterns Among People from Vietnam and Ukraine Living in the Czech Republic

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Abstract

In 2019, a questionnaire was conducted among foreigners living in the Czech Republic focused on gambling, in which 110 respondents from Vietnam and 80 respondents from Ukraine answered. Firstly, the Attitudes towards gambling scale (ATGS-8) was used to discover respondents' attitudes to gambling. Secondly, their experience with gambling was examined with the help of the Problem Gambling Severity Index (PGSI) which allowed, among others, to estimate the level of prevalence of problem gambling in these groups. The methods used allowed us to compare both the Ukrainians to Vietnamese as well as Ukrainians and Vietnamese to Czechs, as similar survey was conducted among the major population of the country in 2017. The overall score of attitudes to gambling is slightly higher for the citizens of Ukraine (17.97) and Vietnam (18.29) compared to the majority. The Vietnamese living in the Czech Republic also have a significantly higher proportion of people in the category of pathological gamblers as based on the PGSI index (Vietnamese 4.2%), whilst the value of this index for Ukrainians (0.7%) is similar to the one of the majority. The analysis of immigrants' gambling behaviour shows that Ukrainians are more like the majority population. The Vietnamese immigrants differ from both the majority population and Ukrainians in terms of attitudes whilst gambling is for them as common problem as alcohol consumption, and an even bigger problem than smoking.

Keywords Gambling · ATGS-8 · PGSI · Vietnamese · Ukrainians

Introduction

Gambling is an important but often overlooked part of every individual's life. On one hand, it is a completely natural phenomenon (Raento & Berry, 1999) which has significantly contributed to the development of probability theory (Ferentzy & Turner, 2013). On the other hand, it is regulated in all the countries of the world with regard to the possibility of dependence (Planzer et al., 2014). In recent years the Czech Republic has begun to tighten gambling conditions and the availability of gambling has decreased, yet the country

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is among the world's best in terms of the number of gambling houses and casinos in operation (Szczyrba et al., 2015). In the past it was typical that only foreigners could play in the casinos which were open (Ludwig et al., 2013). Such an example was the first casino in the Czech Republic, which was established in 1988 in Karlovy Vary (Kasal, 2002). After the Velvet revolution of 1989 brought in its wake a new political, economic and societal regime based on a free democratic society and a free-market economy, the casinos were first established in spa towns and tourist centres. Later they were opened in border areas, especially the borders with Germany and Austria (Fiedor et al., 2017). The main reason for locating casinos on the border was most likely related to the very strict legislation that existed in neighbouring states concerning the operation of gambling (Mravčík et al., 2014). A similar localization strategy is used by Vietnamese living in the Czech Republic. At the level of administrative districts of municipalities with extended powers, a correlation coefficient was calculated in the function of the proportion of Vietnamese by ethnicity in the population and the number of gaming facilities per thousand inhabitants.¹ The value reached 0.48 (Fiedor, 2020). Although if there is no clear causal relationship between these two variables (proportion of Vietnamese and number of gaming facilities), the increased availability of gambling establishments itself can affect the rate of participation in gambling and, consequently, the prevalence of problem gambling (Kato & Goto, 2018; McMillen & Doran, 2006; Pearce et al., 2008; Welte et al., 2016). Moreover, scholars have already highlighted increased participation in gambling and the associated increased levels of problem gambling among Chinese and Vietnamese people living in the United States and Australia (Breen et al., 2002; Kim, 2012; Ohtsuka & Ohtsuka, 2010; Papineau, 2005; Petry et al., 2003). Suppositions have also been made regarding the fact that a higher risk of problem gambling may occur in immigrants because they choose gambling as a means of coping with acculturative stress and to facilitate social integration (Clarke et al., 2007; Loo et al., 2008). However, current research on gambling in the Czech Republic is mainly focused on the treatment of pathological gambling, and on the effects of changing the legislation in this area. The paper will focus on the two most represented groups of so-called third country nationals living in the country,² i.e. Ukrainian and Vietnamese citizens. Both groups are, in a way, traditional immigrant groups in the Czech Republic and, due to geographical location, the Ukrainians are "older". Moreover, according to current knowledge acquired from the borders of the Czech Republic, Vietnamese are characterized by an increased level of participation in gambling (see references above). Therefore, we can also assume an increase in the probability of problem gambling within this group in the Czech Republic. At the same time, the experts in the field of addictology point out that of the 89–105 thousand adults who are pathological gamblers living in the Czech Republic (estimates based on a 2018 survey), very few of them start treatment (Mravčík et al., 2020). Foreigners living in the Czech Republic are one of the most vulnerable groups, especially in relation to seeking treatment. There is a much lower probability that they will seek help, and this arises from insufficient knowledge of the language, culture and the overall environment in which they live (Alba & Foner, 2015; De Haas et al., 2020). In addition, it can be assumed that their treatment options are often even more limited than those of the Czech majority.

¹ Official data for ethnicity, which is only declared and not assigned for example in the term of citizenship, are only available from the census of the population, which is only carried out every ten years.

² As in other member states of the European Union, the term „third country national“ refers to any person who is not a citizen of the European Union and is not entitled to the European Union's right to free movement (European Commission, 2021).

The aim of the study is therefore threefold. First, to find out what are the attitudes to gambling of foreigners living in the Czech Republic. Moreover, there is an opportunity to compare their attitudes with those of the majority population (the research was conducted in 2017). Following attitudes to gambling, the paper will focus on the level of participation in gambling and the estimation of the prevalence of pathological gambling in this group of the population. The third and final goal of the work is to estimate the degree of integration of selected groups of foreigners into the majority society, despite the fact that gambling is a rather negative aspect of their lives.

Characteristics of Selected Group of Foreigners

The Czech Republic has traditionally been a country of emigration rather than immigration, and for decades it had almost no foreign population (from the end of World War II until the beginning of the 1990s), but it is currently by far the most attractive country for long-term and permanent immigrants in the Central European post-communist region (Seidlová, 2018). At the end of 2020, the country was host to 634,790 immigrants, making up about 6% of the population of the Czech Republic (based on citizenship). The most numerous groups are Ukrainians (165 thousand; 26% of the foreigners), followed by Slovaks (124 thousand; 20%), Vietnamese (63 thousand; 10%) and Russians (42 thousand; 7%) (MVCR, 2021). These numbers confirm the attractiveness of the country, and when compared to the figures from the beginning of our research (March 2019), the number of immigrants living in the country has grown by 65,886 (i.e., 12%) in less than two years, despite the coronavirus pandemic and the newly adopted strict immigration measures.

The first traces of the presence of Ukrainians in the Czech Republic can be found as early as the sixteenth and seventeenth centuries, when the first students and soldiers of fortune began to arrive. This movement of people increased when two parts of Ukraine (Galicia, Bukovina) first became part of the Austro-Hungarian Empire (end of the nineteenth century) and then of newly born Czechoslovakia (1918). The newcomers were mainly students coming to study in Prague and people leaving the Ukraine for political reasons. In other words, these were highly qualified migrants and they also maintained an exceptional social life within the Ukrainian ex-pat community. Many of those people were forced to return to Ukraine after the Second World War. The era of the Cold War (1948–1989) brought an end to this migration (Leontiyeva, 2006). After 1989 and, more specifically, after 1993, the Czech Republic was again open (not only) to Ukrainian migrants. Currently most Ukrainian migrants are here primarily for economic and work-related reasons. They are mostly employed in construction, and in some industrial sectors, as well as services and agriculture. They chiefly have unskilled, manual, low-paid, so-called “3D” (demanding, dirty and dangerous) jobs, even though the proportion of highly skilled migrants (working for example in IT sector) is growing (Drbohlav & Seidlová, 2016).

The presence of Vietnamese people is, in contrast, only the result of friendship and partnership between two socialistic states during the Cold War: Czechoslovakia, as the much more developed industrial state offered to train Vietnamese people who were favoured by their regime so that they could return to Vietnam and use their skills to contribute to the development of Vietnamese industry. Their lives were limited to the industrial plant and its school and dormitory, which were usually located on one site. So for the majority of the population these immigrants were invisible. However, as the socialist regime in Czechoslovakia was coming to an end, many of those who were supposed to return to Vietnam

didn't do so and decided to stay here (Freidingerová, 2014). These people laid the foundations of the current Vietnamese diaspora in the Czech Republic: they already knew the language and the basic rules about how the society works, they quickly established businesses (mostly selling clothes) and helped their compatriots to enter the country. Nowadays the community is represented in all sectors of the economy, even if the most visible aspects remain the small convenience stores, open from early morning till late night.

Data and Methods

The basic technique for collecting data on the gambling characteristics of a population living in a certain area is through a questionnaire, as was used in the case of this paper. The questionnaire was prepared in the Czech language and subsequently translated into five languages (Ukrainian, Vietnamese, Russian, English and Mongolian), in order to reach the five most represented groups of third country nationals living in the Czech Republic, i.e. citizens of Ukraine, Vietnam, Russia, USA and Mongolia. The data about the number of foreigners living in the country are collected by the Ministry of the Interior of the Czech Republic on a monthly basis. The information concerning how many foreigners are allowed to stay in the country is available for all the districts and regions of the country, and includes information regarding their sex (men/women) and the type of stay (temporary/permanent).

At the end of the first quarter of 2019,³ a total of 568,904 foreigners lived in the Czech Republic, of which 292,012 had permanent residence and 276,892 had temporary residence (MVCR, 2019). In relation to third country nationals, there were 202,686 with permanent residence and 131,526 with temporary residence. At the same time, 67.3% of third country nationals with permanent residence and 44.3% with temporary residence have Ukrainian or Vietnamese citizenship. So these are the two most numerous groups of third country nationals in the Czech Republic. At the same time, large differences can be seen in these two groups of migrants, stemming from their different, broadly defined, cultural frameworks.

The questionnaire consisted of three parts. The first dealt with attitudes towards gambling, and for this purpose we used the tool "Attitudes Towards Gambling Scale-8" (ATGS-8). This is one of many tools developed to measure attitudes toward gambling, and has been selected as it asks the same questions as the previous survey carried out in 2017 (Fiedor et al., 2019). ATGS-8 is a set of eight statements for which the respondent indicates the degree of his/her (dis)agreement on a five-point Likert scale (from 1 – strongly agree to 5 – strongly disagree). However, the nature of questions 1, 4, 6 and 7 leads to the opposite value scaling, i.e. 1 – strongly disagree to 5 – strongly agree. The final score, which is created as the sum of values for each question, can then range from 8 to 40. Due to the scope of the variable created in this way, it is possible to use it as a continuous variable. The lower the overall score achieved by the respondent, the more negative is his/her attitude towards gambling. A score of 24 can be perceived as a neutral attitude towards gambling. The second part of the questionnaire consisted of questions about the frequency of playing individual games. If the respondent had played a game/gambled in the last year, he/she also answered the nine questions that make up the "Problem Gambling Severity

³ This point in time was chosen because the questionnaire was being prepared at that time.

Index” (PGSI), which captures the risk of problem gambling. The answers to these questions are scored on a scale from never (0) to almost always (3). The sum of points gives the final score. Respondents with a final score of zero are in the category of no risk, respondents with a maximum of two points are at low risk, respondents with three to seven points are at medium risk and, finally, the respondents with eight or more points are at a high risk of problem gambling. The third and final part of the questionnaire was focused on the respondents’ experiences with addictive substances and asked for the basic identification of the respondents (such as age, sex or level of education).

The collection of data was carried out using a paper questionnaire which was distributed among foreigners living in the Czech Republic, mainly in regions with a higher concentration of foreigners (Prague, Brno, Karlovy Vary, Náchod and Cheb). Although such a method of selecting respondents cannot be considered as completely random (not every respondent has the same chance of being selected), on the other hand, there are no aids available for selecting foreigners living in the Czech Republic, so it is not possible to use normal methods of random selection. For this reason, our method for selecting respondents can be considered more representative than the commonly used method of snowball.

216 questionnaires were collected, of which 110 were completed by respondents from Vietnam, 80 by respondents from Ukraine, 21 by respondents from other countries and 5 respondents did not state their nationality. With regard to the significant predominance of two nationalities, i.e. Vietnamese and Ukrainians, and the low number of respondents from other countries, we decided to limit the presented analysis to these two groups and to compare them. However, some questionnaires were discarded because they were not fully completed, so the final set consists of 171 respondents, with 100 questionnaires completed by Vietnamese and 71 by Ukrainians. Due to the unknown socio-demographic structure of foreigners living in the Czech Republic⁴ and our desire to compare the results of the present survey with a similar survey conducted among the Czech majority in 2017, we created weights based on the gender and age of each respondent, and which corresponded to the population structure of the Czech Republic. Thus, the results of this survey can be directly compared with the previously published survey (Fiedor et al., 2019) with the potential influence of age and gender removed.⁵

The results were analysed using common methods of descriptive and inferential statistics. It is necessary to point out the weaker reliability of the identified attitudes to gambling, where the Cronbach’s alpha reached the value of 0.58 for the citizens of Vietnam and the value of 0.53 for the citizens of Ukraine. In both cases, the second statement of the ATGS-8 tool seems to be problematic, because omitting it would increase the value of Cronbach’s alpha. However, as we need to compare our results with the research carried out in 2017, the answers to this statement will not be omitted. Although the lowest acceptable value for Cronbach’s alpha is most often given as 0.6 (Churchill Jr, 1979), some textbooks refer to values in the range of 0.5–0.6 as of moderate reliability (Hinton et al., 2014). However, caution should be exercised in interpreting the ATGS-8 score.

⁴ The Czech Statistical Office publishes data about foreigners living in the Czech Republic and their socio-demographic characteristics based on data from the Directorate of the Aliens Police Service. This means that those data are available only for the big group of all foreigners together and it is not possible to acquire the data only for third country nationals or for individual groups of foreigners based on their nationality (ČSÚ, 2021).

⁵ It is clear from the literature that both men (Nower et al., 2004; Volberg et al., 2001; Welte et al., 2006) and younger respondents (Griffiths, 2009; Gupta & Derevensky, 1998) have more positive attitudes towards gambling and gamble more often compared to others.

The term *integration* is used by various researchers to describe not only the process of integration, but also its results, on a range of levels (individual-group-state). *At the level of individuals*, integration is simultaneously a *process* of integrating individuals into the majority society, as well as a subsequent *outcome*. Integration as a *process* means incorporating newcomers into an already existing society that has a certain structure. Heckmann and Schnapper (2003) defined four basic dimensions of the process of social integration: *structural* (gaining rights, including access to membership of key institutions in the host society and being able to hold positions in those institutions), *cultural*, *interactive* (personal participation of immigrants in relationships in the host society) and *identification* (the sense of belonging to the majority). This *process* is necessarily two-sided: for immigrants it means learning about the new culture, acquiring rights and responsibilities and gaining access to positions in society, and social status; while for the host society it means opening up the institutions and ensuring equal opportunities for migrants. For integration to be seen as the *resulting state* usually depends on the idea of immigrants occupying similar positions in a society to the members of the majority society. This is a means of measuring the success of particular integration policies; they can be evaluated by comparing the values of selected indicators between the majority and the immigrant population.

Results

In accordance with the research objectives, the analytical part of the paper will focus on two areas. The first is the attitudes of foreigners towards gambling. We can expect that Vietnamese nationals will have a slightly more positive attitude towards gambling than Ukrainian nationals. The attitudes towards gambling could be derived from past experiences with gambling, on the basis of which it is possible to estimate the prevalence of problem or pathological gambling (the second part of the results). In both parts of the analysis, emphasis will be placed on both (1) the mutual comparison of both groups of respondents defined by their nationality, and on (2) the comparison of the results from our respondents with the previously published results of the survey of the majority population. This also allows us to draw conclusions regarding the level of integration of both groups of respondents into the majority society. First however, we will describe our sample of respondents and the differences between the citizens of Ukraine and of Vietnam.

The respondents of both nationalities are most represented by those with long-term residence visas (49.0% of Vietnamese and 48.8% of Ukrainians), followed by those with permanent residence (45.2% of Vietnamese and 40.4% of Ukrainians). In both cases the most common reason for their stay in the Czech Republic is employment or business (57.6% of Vietnamese and 53.4% of Ukrainians), followed by family reunification (31.6% of Vietnamese and 25.5% of Ukrainians). There is a significant difference between these two groups of foreigners in our sample as regards their highest level of completed education: the citizens of Ukraine achieved a higher level of education and they are also able to communicate better in Czech (only 9.5% of Ukrainians do not speak Czech, compared to 23.3% of Vietnamese).⁶ Respondents with Ukrainian citizenship predominate in the use of addictive substances (alcohol consumption, smoking). According to the respondents, a total of

⁶ After combining the categories “I don’t speak Czech” and “I only know basic words, I have a problem communicating” this is 33% of Vietnamese (the proportion of Ukrainians has not changed).

49.5% of Ukrainians have experience with smoking, while for Vietnamese the figure is only 29.0%. 88.5% of Ukrainians and 56.6% of Vietnamese have experience with alcohol consumption. If we focus on the more frequent alcohol consumption (i.e. consumption at least several times a month), then the situation is more equal (45.3% of Ukrainians and 39.3% of Vietnamese are in this category).

Attitudes to Gambling

Attitudes towards gambling is a frequently researched topic across many countries around the world (Delfabbro & King, 2020). One of the tools used to measure attitudes to gambling is the ATGS-8.⁷ Table 1 shows, as a percentage, the responses to the eight statements that make up the ATGS-8 tool from both groups of foreigners (Ukrainians and Vietnamese). The table also displays the arithmetic means and standard deviations for all eight statements of the ATGS-8 and the overall score of attitude. The overall score is very similar for the citizens of Ukraine and Vietnam, as well as for the majority population in 2017 (Fiedor et al., 2019), and this can be clearly described as negative (the middle of the scale, i.e. a neutral attitude, has a value of 24). The overall score is slightly higher for the citizens of Ukraine (17.97) and Vietnam (18.29) compared to the majority. The distribution of the frequency of the answers to individual statements from the Ukrainians was very close to the distribution of the frequency of the answers from respondents belonging to the majority population. The most significant differences compared to the majority were found in the fourth and seventh statements. On the other hand, the respondents with Vietnamese nationality were much less likely to choose the option “neutral attitude towards the statement”. Only in the case of the sixth statement is the average score of the answers lower than two (while such a situation occurs for three statements in the cases of the majority population and Ukrainian citizens).

The overall attitude to gambling is certainly influenced by the number of games of chance the respondents played in the past year. Usually the most negative attitudes towards gambling are held by respondents with very little or no experience of gambling. And here too, it is clear that the greater the variety of games of chance played by a respondent in the last year, the less negative is his/her attitude towards gambling (Table 2). Vietnamese citizens have slightly more experience with gambling (at least four different games were played by more than 6%; at least three games were played by over 9%) than Ukrainians. Nevertheless, this is where we find the biggest difference between the majority population and foreigners. More than a quarter (27.5%) of respondents in the majority population played three or more games of chance and the attitude of those with the most experience could be described as neutral – score 24.26 (Fiedor et al., 2019).

Prevalence of Problem Gambling

While the level of participation in gambling was found to be not very high among Ukrainian and Vietnamese citizens living in the Czech Republic, it is different story concerning the potential development of problem gambling. The differences between these two groups were huge. Among Ukrainian citizens, only 2.6% of respondents were at risk of

⁷ Originally, this tool contained 14 items (Orford et al., 2009), later it was reduced to only 8 (Salonen et al., 2014).

Table 1 Results of the survey of attitudes to gambling among citizens of Ukraine and Vietnam living in the Czech Republic (2019) and a comparison to the attitude of the Czech majority (2017)

	Majority				Ukraine				Vietnam			
	2017		2019		2019		2019		2019		2019	
	A (%)	N (%)	D (%)	Mean (SD)	A (%)	N (%)	D (%)	Mean (SD)	A (%)	N (%)	D (%)	Mean (SD)
1	39.7	19.9	40.4	2.95 (1.30)	38.4	25.2	36.4	2.95 (1.24)	18.3	14.4	67.3	2.44 (1.59)
2	82.7	11.3	6.0	1.86 (0.90)	84.8	14.4	0.9	1.76 (0.72)	62.7	12.7	24.5	2.47 (1.08)
3	73.4	15.4	11.2	1.97 (1.09)	66.7	30.6	2.7	2.03 (0.92)	75.9	8.1	16.0	2.10 (1.25)
4	13.1	24.5	62.4	2.28 (1.08)	22.1	41.5	36.4	2.93 (1.01)	25.0	23.4	51.5	2.74 (1.33)
5	86.6	7.3	6.1	1.63 (0.94)	76.2	19.6	4.2	1.69 (0.95)	77.3	3.1	19.7	2.13 (1.37)
6	9.7	18.9	71.4	2.05 (1.03)	3.7	25.4	71.0	2.10 (1.98)	10.3	13.6	76.1	1.94 (2.33)
7	25.4	25.9	48.7	2.60 (1.21)	7.1	29.1	63.9	2.11 (2.03)	10.3	17.6	72.1	2.01 (2.25)
8	56.1	20.6	23.3	2.42 (1.26)	53.7	34.2	12.1	2.40 (1.08)	60.3	18.0	21.6	2.47 (1.27)
Total sum (sum of 8 items)	-	-	17.76 (5.64)	-	-	-	17.97 (4.15)	-	-	-	18.29 (4.28)	-

Source: Fiedor et al. (2019), questionnaire, own data
 A agree, N neutral, D disagree, SD standard deviation

Table 2 Overall attitude to gambling among citizens of Ukraine and Vietnam based on the number of games they played in the past year

Number of games	Mean (SD)		Respondents (%)	
	Ukraine	Vietnam	Ukraine	Vietnam
0	16.01 (6.88)	15.42 (6.05)	69.41	68.61
1	14.96 (4.52)	18.05 (7.77)	14.42	18.93
2	21.04 (0.92)	20.33 (8.18)	11.48	3.28
3	19.47 (2.73)	19.00 (3.86)	3.17	2.92
4	–	23.69 (6.55)	0.00	2.47
5+	20.56 (3.98)	21.52 (2.03)	1.52	3.80

Source: questionnaire; own data
SD standard deviation

Table 3 Share of respondents according to the Problem Gambling Severity Index (PGSI) score, the average number of games of chance they played in the past year in relation to their citizenship

PGSI score	Respondents (%)		Average number of games	
	VIE	UA	VIE	UA
"< 1;2>" (low-risk)	5.92	1.51	1.62	1.95
"< 3;7>" (moderate-risk)	4.81	0.35	2.60	2.00
"> 7" (problem gambler)	4.21	0.70	3.73	4.50
"> 0" (at some risk)	14.94	2.56	2.53	2.66

Source: questionnaire; own data
VIE Vietnam, UA Ukraine



Fig. 1 Frequency of specific forms of gambling by citizens of Vietnam (left) and Ukraine (right). Source: questionnaire; own data. Type of game: a – money lotteries, b – numerical lotteries, c – instant lotteries (scratchcards), d – totalizator games, e – bingo, f – casino games (roulette, card games), g – tournament card games (poker), h – gaming machines, i – raffles, j – fixed-odds betting, k – racing bets, l – online games (with money)

developing problem gambling, while for Vietnamese citizens 14.9% of respondents were at risk (Table 3). At the highest level (PGSI score higher than 7 = > “problem gambler”), 4.2% of respondents had Vietnamese citizenship and only 0.7% were Ukrainian citizens.

The relationship between problem gambling and participation in gambling in the last year is relatively strong and in both cases, at the level of significance $\alpha=0.05$, it is statistically significant. For the Vietnamese, the strength of this relationship, measured by the Spearman coefficient of order correlation, is 0.43; for Ukrainians it is 0.59. This means that the more games a respondent played, the higher the PGSI score he/she achieved. When

creating categories from the PGSI score, it also appears that the increasing risk category also increases the average number of games of chance that respondents played in the past year (Table 3). One of the possible causes of the greater risk of developing problem gambling among Vietnamese citizens can be seen in their different preferences in gambling, as well as in their more frequent gambling. While Ukrainian nationals play more numerical lotteries, raffles, bingo and tournament card games (poker), Vietnamese nationals in general play more money and instant lotteries (mainly those with immediate results, i.e. scratchcards) and casino games, odds betting and online cash games (Fig. 1). There is also a significant difference in the frequency that these games are played: for Ukrainians, there are only three games which some respondents mainly play often (several times a week), while for the Vietnamese it can be observed that all types of games are played by some of the respondents on a daily basis.

Discussion and Conclusions

The results presented above show that the behaviour of foreigners in the field of gambling is, in some aspects, similar to the behaviour of the majority population of the Czech Republic, while in other aspects the behaviour is completely different. When compared with other countries where the research on attitudes to gambling was also conducted through ATGS-8, it is clear that the attitudes of both groups of foreigners (Vietnamese and Ukrainians) in the Czech Republic are more negative, yet their attitudes do not differ in any way from those of the majority society.⁸ Unfortunately, as far as the authors are aware, no research has yet been carried out on attitudes towards gambling in the countries of origin of the foreign groups in our study, neither in Ukraine nor in Vietnam. Nevertheless, a comparison can be offered in the form of gambling research undertaken in Asian communities living in the United Kingdom. The research shows that the average ATGS-8 score for this population group was equal to 18.62 (Forrest & Wardle, 2011), which means only a slight difference compared to Vietnamese living in the Czech Republic (18.29). At the same time, the cited research also shows that this ethnic group had significantly lower average scores compared to others.

Participation in gambling was similar in both groups – in the last year less than a third of respondents from Ukraine and Vietnam took part in gambling. This is one third less than in the majority population survey (Fiedor et al., 2019). It should be noted that while some foreign studies among immigrants point to a lower level of gambling prevalence compared to the majority population (Afifi et al., 2010; Walker et al., 2006), others have not found such a difference (Alegria et al., 2009; Volberg et al., 2006; Welte et al., 2001). One potential explanation is provided by Kim (2012), who points out minor methodological differences. Studies that found no difference in the prevalence of gambling among foreigners and the majority population used English in the questionnaire (these surveys were conducted in English-speaking countries among Asian immigrants), as opposed to other surveys which were conducted in the native languages of the immigrants. Such an explanation would mean that the degree of integration of those who speak the language of the majority population is higher, and this also became evident as regards gambling.

⁸ Australia: 20.2 (McAllister, 2014); Finland: 22.9 (Salonen et al., 2014); Israel: 19.5 (Gavriel-Fried, 2015); United Kingdom: 22.4 (Orford et al., 2009). The values indicate the average scores of the majority population of individual states according to ATGS-8.

Despite the low participation in gambling, the Vietnamese living in the Czech Republic have a significantly higher proportion of people in the category of pathological gamblers; based on the PGSI index—Vietnamese 4.2%, Ukrainians 0.7% and the majority population 0.6–1.0% (Szczyrba et al., 2015). This significantly higher prevalence of pathological gambling among Asian immigrants is shown by most foreign studies (Kim, 2012). The explanation can be partially found in the games that are preferred by Vietnamese, in contrast to Ukrainians and the majority population. The games of chance most played by Vietnamese include lotteries, casino games, odds betting and online games. Casino games, odds betting and online games are particularly classified as “problem-causing”. In contrast, Ukrainians, as with the majority population, mostly play numerical lotteries, raffles, bingo and poker, which are generally classified as “non-problematic” (Fiedor et al., 2019).

The analysis of immigrants’ gambling behaviour shows that Ukrainians are more like the majority population – they play similar games, they have very similar attitudes to gambling, and the prevalence of pathological gambling is almost the same in both population groups. The aspects of gambling by Vietnamese immigrants that differ from the majority population have been quite extensively studied abroad, especially in Canada, the United States and Australia, but this has not been the case in Central and Eastern Europe, where these kind of studies have been absent. At the same time, the Czech Republic is a country where access to gambling is easy, and in many cases this can cause pathological gambling among Vietnamese immigrants. For them, gambling is as common problem as alcohol consumption, and an even bigger problem than smoking.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or research committee and with the 1964 Helsinki declaration and its amendments or comparable ethical standards.

Data availability statement The data that support the findings of this study are available from the corresponding author, [DF], upon reasonable request.

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