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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии
საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

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GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman (Кириллица)**, для текста на грузинском языке следует использовать **AcadNusx**. Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - <http://www.spinesurgery.ru/files/publish.pdf> и http://www.nlm.nih.gov/bsd/uniform_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректур авторам не высылаются, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface - **Times New Roman (Cyrillic)**, print size - 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf

In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

**Articles that Fail to Meet the Aforementioned
Requirements are not Assigned to be Reviewed.**

ავტორთა საქურაღებოლ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დაიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx**. შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრაფიების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფხიხლებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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COVID-19 SAFETY MEASURES AND THEIR EFFECTS ON GAMBLING HABITS: AN INVESTIGATIVE STUDY

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Abstract.

This study looked at the way COVID-19 was starting to affect gambling during first six weeks of emergency actions. The following factors were evaluated: the economic effect of COVID-19 on internet gambling, according to COVID-19, psychological issues, addiction to drugs, and risky gambling habits and intentions. Online survey with cross-sectional data of 2015 gamblers was conducted, with a subsample of 1048 people who gambled online (age 18 and older). Numerous metrics of correlation and probability ratio analyses were performed. The Issue of Gambling Intensity Index's extremely dangerous gamblers and those who have gambled online are more likely to engage in gambling online, according to the outcomes, even though there was an obvious transition toward physical gaming. The most predicted indicators for high-risk gamblers on the internet were moderate to severe depression and anxiety, reduced work weeks, convincing themselves to gamble by COVID-19, gambling under the effects of alcohol or cannabis, and dangerous gambling motivations related to psychological disorders, such as gambling to relieve anxiety and depressive disorders, chasing gambling damages, and trying to make money from gambling. This research has validated numerous risk connections associated with gambling risk, psychological issues, and substance use reported in previous studies on the worldwide recession and upcoming COVID-19-related investigations. In contrast to many other inquiries, the current research considers each component comprehensively. It offers more information on the risk factors associated with online gambling throughout the epidemic.

Key words. Gambling habits, depression, COVID-19, mental health, financial stress.

Introduction.

Gambling habits include an extensive range of actions and behaviors associated with gambling and random games, which affect individuals and the community [1]. These behaviors could range from frequent relaxation gambling to habitual and addicted gambling behaviors. Gambling can be tempting because of the excitement of taking a chance and the potential for significant financial profits. It can severe personal and economic consequences done excessively. This intricate and varied phenomenon is affected by various variables, including one's mental state, cultural and social standards, economic surroundings, and the availability of gambling possibilities [2]. Recognizing gambling behaviors and their effects is essential

for dealing with issues like dependency, responsible gambling, and the overall impact on communities and individuals. A global health emergency known as COVID-19, brought by the brand-new corona virus.

SARS-CoV-2, has changed the way society operates [3]. The virus, which first appeared in late 2019 and quickly spread worldwide, caused social disruption and significant public health problems [4]. To stop the spread of COVID-19, governments, healthcare institutions, and communities have adopted various strategies, such as lockdowns, travel bans, vaccination drives, and social isolation procedures. The pandemic's wide-ranging effects go throughout the field of medicine, significantly impacting economic growth, education, and everyday life [5]. Navigating this catastrophe and creating plans for reducing its impact on public health and the global community requires understanding the causes, transmission, avoidance, and treatment of COVID-19 [6]. The COVID-19 pandemic significantly impacted many facets of daily life and brought in new phase of international health and safety requirements. Gambling behaviors are a particular field that these measurements significantly impact [7]. Governments all across the world enacted tight regulations, such as lockdowns, social segregation rules, and the temporary shutdown of gaming facilities, to slow the virus' spread. These measures altered the mechanics of the way individuals interact with games of chance, leading to the move toward internet gambling and changing the gambling location [8]. The economic effects of the epidemic, such as job losses and unstable finances, also impacted gamblers' behavior because they were looking for both enjoyment and probable cash comfort during these difficult times [9]. Study [10] conducted seven months into the pandemic using the same technique and in the identical region, intends to expand our knowledge about possible gambling-related shifts in population during COVID-19. Changes caused by COVID-19 in the daily routines of those with hazardous gambling tendencies can give rise to increased gambling. Therefore, a susceptible population exhibits a higher prevalence of gambling emigration and psychosocial issues and could need special consideration in examination and therapy contexts as well as additional scientific analysis. Study [11] investigated self-reported online gambling activity in Sweden throughout the COVID-19 outbreak. Their research depends on an anonymized web check of Swedish web panellists (N=1501) that was created to examine a variety of changes in behavior that occurred throughout the COVID-19 pandemic. Most of the individuals to gamble stated that the

COVID-19 epidemic had no effect on their gaming habits. A group of people with gambling issues and emotional distress were the one who observed a rise in the COVID-19 pandemic and card games. Study [12] compared the indications of gambling disorder (GD) at the initial stage of therapy while under lock down, as well as to assess patients' gaming habits and appetite. In their unusual circumstance, the effects of certain structural aspects of gambling actions that promote gambling behavior were investigated among troubled gamblers receiving therapy. The more frequent monitoring that takes place throughout treatment, the longer it lasts, and the results were in regard to decreasing symptoms. The symptoms decreased due to both internal and external variables during the lockdown. Research [13] examined the way gambling habits changed in Sweden throughout the 1st and 2nd phases of the COVID-19 pandemic. Social networking sites were used to find participants that have gambled. During the 2nd wave, a portion of the population (n = 139) performed an additional survey. The findings revealed no evidence of a link between greater regular gambling habit and COVID-19 effects (financial or increased isolation). No significant movements between different kinds of games were observed. To truly comprehend the long-term effects of the worldwide epidemic, further research over time in populations at risk was required. Study [14] examined casino patrons' gaming habits at three different moments in time. Three weeks after the lockdown ended, all participants in the first wave of the long-term investigation participants had completed the form by the deadline were contacted to disclose their gambling habits. Gamers who were expanding their gambling activities ought to receive additional consideration. It was crucial that casinos respond to people who have stepped up their gaming throughout the global epidemic with the proper player safety precautions. Study [15] analyzed an assortment of online casino players' actions prior to and following the COVID-19 epidemic that was declared in March 2020. The data showed a notable decline in the total number of dangerous participants over the course of the 5-month trial period. While numerous organizations have asserted that more time spent at home throughout the pandemic would contribute to a rise in gambling and problems with gambling, the findings from the present investigation demonstrates that the reverse was not actually happening because at minimum between Swedish gamblers, gambling concentration reduced. Study [16] investigated the connection between modifications to gambling behavior during the Corona virus 2019 (COVID-19) lockdown and financial security. Participants revealed their monthly gambling exposure to modern times, along with their material well-being experiences of financial difficulties due to COVID, the extent of their issue with gambling, and psychological suffering. Significant negative correlations between financial security, gambling addiction, and psychological suffering have been identified. Their study offers early evidence that one's reported financial condition was negatively correlated with gambling problems but unrelated to gambling activity. Study [17] examined the effects of the closure of gambling establishments on Australians, especially those at risk for psychological problems and gambling disorders. The COVID-19 epidemic

restricted the practice of gambling and increased psychological pain among the general population. Investigations indicated that, when compared to non-problem and minimal-risk gamblers paired together, those who participated in moderate-risk gambling but didn't suffer from a gambling problem were more inclined to express an increasing gambling frequency. Study [18] analyzed the COVID-19's effect on the relationship between excessive wagering and gaming and the rise in psychological disorders. With the COVID-19 epidemic, unpredictable and difficult global scenario was expected to make individuals anxious and have an adverse effect on their psychological well-being. Gambling and gaming issues improve significantly among individuals who were influenced by and participating in such games, according to investigations that found social motivations for engaging in gaming and gambling to be an important mediator. Study [19] investigated behaviour related to online gambling throughout the COVID-19 physical gambling prohibitions and connections with Changes in Mental well-being, effects on family income caused by the global epidemic, economic motivations, and signs of gambling issues. Participants that exhibited additional signs of problematic gambling and adverse effects on family finances as a result of COVID-19 individuals who indicated more serious depression and anxiety sensations between waves. Study [20] examined the way environmental factors, that include Covid-19 control measures, can influence gambling behavior and to reveal it could have a direct effect on public policy. About 36.4% of Italians participate in gambling, which has an impact on social interactions, economic performance, and the general well-being. Gambling was a complicated and persistent condition in Italy. Additionally, the epidemic brought attention to the significance of internet gambling, which calls for more consideration in public health regulations. The purpose of this investigation is to look into the COVID-19 safety precautions, such as lockdowns and social distancing, have changed people's gambling behaviors, including patterns of behavior, inclinations, and rates of problematic gambling.

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problematic gambling.

Materials and Methods.

Analyses of data:

The frequency distributions, percentages, and other general statistics for important variables were part of a wide descriptive evaluation that was performed. We compared relevant discrete, dichotomous factors using a number of compared chi-square tests, risk proportions, and confidence intervals of 95%. The standard deviation for variations that were significantly different, and it was determined at $P < 0.05$. Important differences were made between the individuals who gambled online and the non-gamblers over the six weeks following the implementation of emergency procedures. In order to compare dangerous gamblers to non-high-risk gamblers and investigate the motivations behind extremely dangerous gambling, more analysis was done on the subsample of internet gamblers ($n = 1048$).

Data collection.

Age, gender, and the greatest level of education attained were among the demographic questions on the survey. Age was entered as a discrete number, such as twenty-three years, and then converted into a category-specific factor, such as eighteen to twenty-four years. Response options under the gender section include transgender, male, female, and decide not to respond. The choices for educational achievement were: no secondary academic or General Education Development (GED), apprenticeship or GED, secondary school or professional accreditation, undergraduate graduate and doctoral degrees, or professional degrees (such as those in law, medicine, or dentistry). In addition, Respondents were requested to provide a rating using a seven-point Likert scale, ranging from strongly concurs to agree, or disagree, and unsure whether COVID-19 had changed their job status and household income.

Questionnaire development.

The Patient Health Questionnaire (PHQ-9) was utilized to test for depression and the Generalized Anxiety Disorder (GAD-7) questionnaire was used to record mental health issues. The same query appears on both tools: How the subsequent issues afflicted in the past two weeks? The Primary Care Assessment of Mental disease (PRIME-MD) is a self-administration diagnostic tool for prevalent mental diseases. The PHQ-9 is an anxiety portion of the PHQ. This subscale consists of nine items with a total score ranging from zero to twenty-seven and based on the Diagnostic and Behavioral Manual of Mental Disorders, Fourth Edition (DSM-IV) diagnostic criteria for depression (e.g., lack of enjoyment when performing things, becoming tired or getting no energy, feeling depressed, sad, or hopeless). Based on the extent of depression, the total scores are considered as follows: beyond-minimal (zero-four), mild (five-nine), medium (ten-fourteen), fairly severe (fifteen-nineteen), and severe (twenty-twenty seven). After extensive validation, this tool showed great internal consistency, high accuracy (88%) and susceptibility (88%) for characteristics of serious distress.

The generalized anxiousness Disorder-7 (GAD-7) measures signs of anxiousness by utilizing seven DSM-IV categories.

The groups of beyond minimal (zero-four), mild (five-nine), medium (ten-fourteen), and severe (fifteen–twenty-one) are used to interpret the scale's score, which ranges from zero to twenty-one. The GAD-7 exhibits 89% sensitivity and 82% specificity at an acceptable score of ten.

Study Rationale.

Understanding the COVID-19's evolving effects in the first six weeks after the declaration of provincial emergency measures was the aim of this research. The investigation's main areas of attention were drug abuse, mental health issues, gambling behaviors, and risk factors for internet behavior. The study's ends were meant to contribute significantly to the field's current state of knowledge, encourage more investigation, and help shape future community outreach and preventative initiatives.

Results.

Demographic factors.

In the sample, the proportion of men and women was equal at 50% each, with 0.3% classifying themselves as "other". The age varied from eighteen to eighty-nine years old, with a typical age of forty-eight years old. The following categories of educational accomplishment were found: no a GED or secondary school diploma (1.7%), high educational institutions or a high school diploma certificate (20.6%), bachelor's degree (35.7%), business or technological certification (18.4%), a master's program (14.8%), a doctorate (8.6%), and professional degrees (8.6%).

Gambling Activities and Risks.

Nearly 52 percent of the total collection of 2015 gamblers was involved in internet gambling during the urgent protocols. The majority of gambling conduct reported over the previous 12 months was terrestrial entirely (75.7%), then followed by a combination of physical and internet-based (15.5%) and only via the internet (8.8%).

Based on the Problem Gambling Severity Index (PGSI) scale, a large proportion of those included in the entire sample were categorised as relatively safe gamblers (15.4%) and non-problem gamblers (70.3%). The rest of the participants were divided between high-risk gamblers (8.1%) and moderate-risk gamblers (6.2%). High internal coherence was found in the validity tests conducted for the PGSI scale's nine categories.

Behavioural health.

Thirty percent of gamblers stated that they endured a psychological problem before COVID-19, with fifteen percent receiving an authorized clinician's diagnosis and nineteen percent self-diagnosing. Among participants who have self-diagnose (85.2%, 54.7%) and those who had a medical diagnosis (71.3%, 67.8%), depression and anxiety were the most reported disorders, accordingly.

According to the GAD-7 survey, 43.6% of the participants lacked any noticeable signs of anxiety. The rest of the participants were divided into three categories: moderate anxiousness (16.1%), extreme anxiety (9.6%), and low anxiety (30.7%). Cronbach's alpha for this scale equipment was 0.93, indicating strong internal coherence throughout the entire sample of gambler ($n = 2015$).

COVID-19's effects.

A significant portion of the participants (49%) stated that COVID-19 had caused some kind of professional interruption. In this group, 16% claimed to have lost their jobs, 7.6% reported having fewer hours worked, 19.3% reported switching to a remote work schedule, and 4.1% showed a part-time remote work schedule. Roughly 25% of respondents said they hadn't implemented any modifications to their full-time (19.3%) or temporary (3.2%) jobs or occupation. Twenty-one percent (20.1%) said they were unemployed or not seeking for work, more than fifty percent of these people were of retired age (65 years or older). Precisely 50% of the entire population indicated that COVID-19 had an adverse effect on their own profits.

Use of Substances.

Six weeks after the region's emergency regulations were implemented, 68.7% of gamblers admitted to consuming alcohol. When compared to the period before the emergency actions, 40.7% of these participants acknowledged that they had consumed more alcohol during this period. Compared to alcohol usage, consumption of cannabis (16.4%) was uncommon among gamblers. However, 48.6% of individuals who reported using cannabis engaged this at a higher rate compared to what they did prior to emergency procedures.

Internet Gambling in Comparison to Offline Gambling.

There are clear distinctions between conventional or offline gambling and online gambling in terms of accessibility, variety of games, social contact, security, regulation, bonuses, payment options, and overall experience. Although there may be security risks, online gambling provides the ease of access via a variety of devices at any time and from any location. It also offers a wide selection of games and promotions. On the other hand, non-online gambling requires physical presence at physical locations, which promotes social interaction and a distinct environment. There were a number of noteworthy distinctions between the online gamblers and the non-gamblers during the emergency procedures in Table 1. Compared to women (n = 482, 46%; p < 0.001), men were more inclined to gamble internet (n = 596, 56.8%, p < 0.001). Elders (65 years of age and over) had lower odds of engaging in internet gambling (n = 192, 18.3%, p = 0.001), whereas younger individuals (n = 142, 13.5%, p = 0.004) and twenty-five years old (n = 386, 36.83%, p = 0.041) had higher odds of having placed internet.

Figure 1 shows PGSI performance. Online gambling was half as common among non-problem gamblers as it was among other high-risk groups (n = 715, 68.2%, p < 0.001). When it came to the probability of playing online during temporary measures, high-stakes players had over nine times the probability (n = 146, 14%, p < 0.002), while moderate-risk gambler had twice as much chance (n = 83, 7.9%; OR = 1.88, p = 0.002).

Figure 2 (A) shows COVID-19 impact and (B) shows GAD-7 for online gambling and no online gambling. One of the few interesting findings was the positive correlation between internet gambling and the COVID-19-related adverse effect on family income (n = 560, 53.4%, p = 0.033). The probabilities of gambling online were lower for those who did not exhibit any signs of anxiousness (GAD-7: n = 443, 42.2%; OR = 0.76, p = 0.002).

Table 1. Odds considerations for the online gaming sector.

Factor	Internet Gambling (n = 1048)		Avoid gambling online (n = 967)	
	n	%	n	%
Gender				
Male	596	56.8	396	40.9
Female	482	46	525	54.2
Age (years)				
18–24	142	13.5	86	8.8
25–44	386	36.83	264	27.3
45–64	349	33.3	340	35.16
65+	192	18.3	220	22.7
Typical Gambling Platform				
Online Only	169	16.12	18	1.86
Land-based Only	654	62.4	865	89.4
Mix of Land and Online	236	22.5	27	2.79

Table 2. Ratios of probability for dangerous PGSI gambling.

Factor	Risky Gamblers (n = 60)		Non-Risky Gamblers (n = 988)	
	n	%	n	%
Gender				
Male	94	156.6	502	50.8
Female	40	66.6	438	44.3
Age (years)				
18–24	26	43.3	113	11.4
25–44	81	135	310	31.3
45–64	21	35	336	34.0
65+	10	16.6	184	18.6

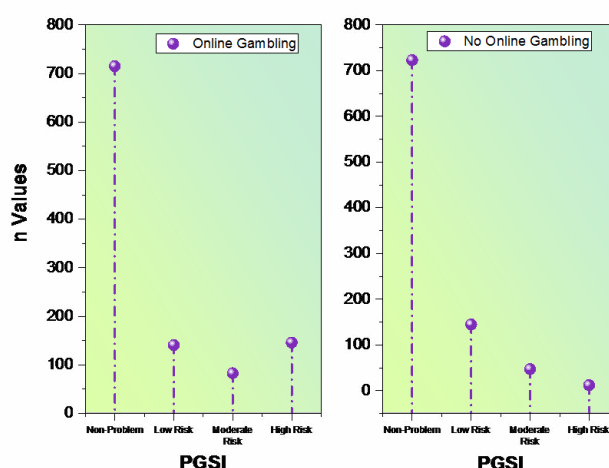
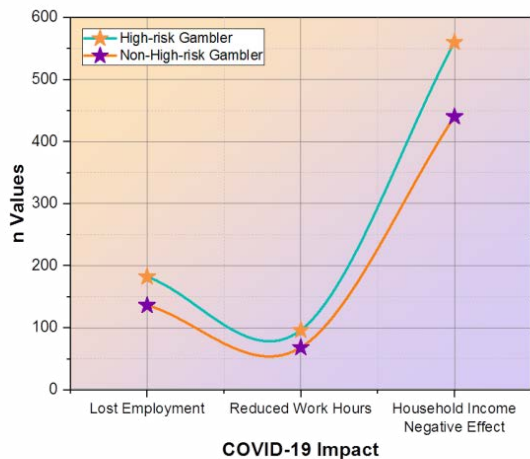


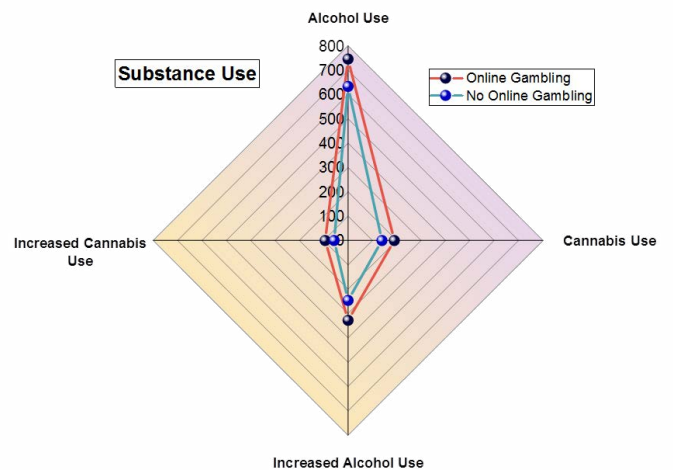
Figure 1. PGSI.

Figure 3 (A) shows substance use, and (B) shows PHQ-9. Online gambling under emergency circumstances was common for those with signs of serious depressive disorders (PHQ-9: n = 114, 10.87%, p = 0.001) and extreme depressive disorders (n = 59, 5.6%, p < 0.001).



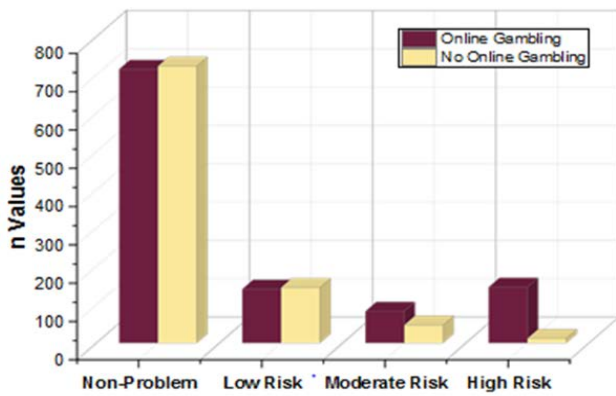
(A)

Figure 2A. COVID-19 impact.



(B)

Figure 3B. PHQ-9.



(B)

Figure 2B. GAD-7.

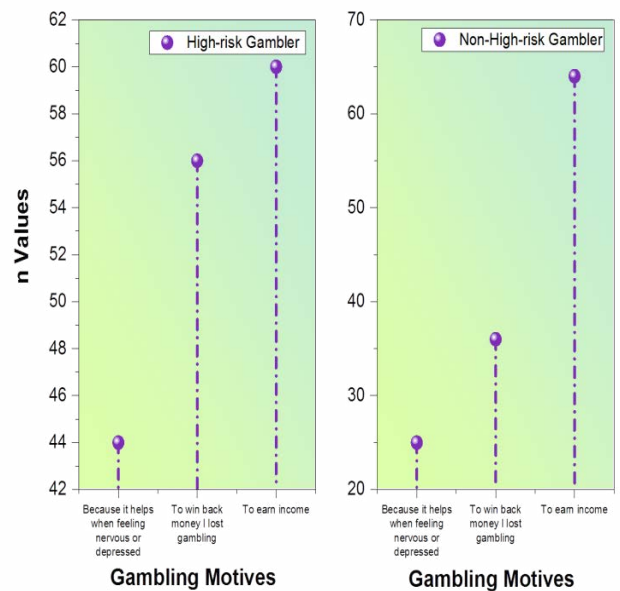
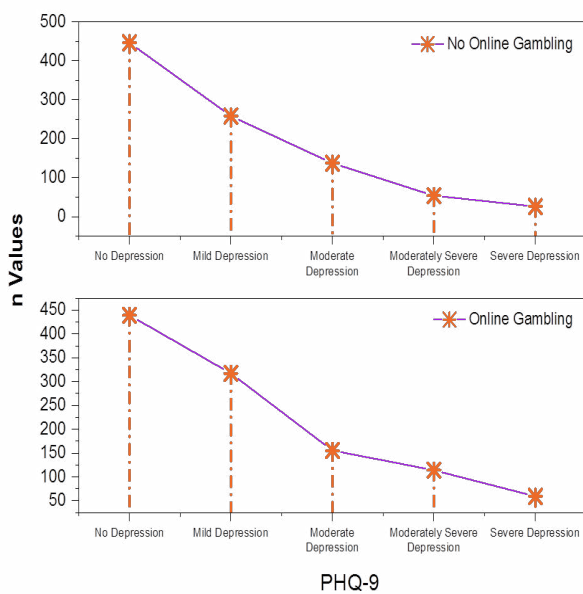


Figure 4. Gambling motives.



(A)

Figure 3A. Substance use.

Internet Gamblers' High-Risk Activities.

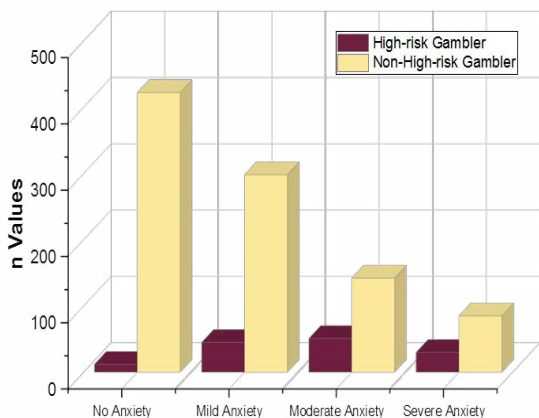
Several significant relationships with dangerous gambling status appeared in sub-sample that participated ($n = 1048$) who gambled internet during emergency actions (Table 2). The probability of dangerous gamblers was higher in men ($n = 94, 156.6\%, p = 0.007$) and lower in women ($n = 40, 66.6\%, p = 0.002$). With regard to dangerous gambling position, participants between the ages of 25 and 44 had the highest odds ($n = 81, 135\%, p < 0.001$), whereas those between the ages of 45 and 64 ($n = 21, 35\%, p < 0.001$) and 65 and older ($n = 10, 16.6, p < 0.001$) had lower chances.

Figure 4 shows gambling motives. The three expressed gambling motivations that distinguished internet gamblers as the most indicative of high-risk gaming condition stood prominent. The reasons for dangerous gambling status were

highest for those who gambled to gain back money they had lost (n = 60, 100%, p < 0.001), to make income (n = 56, 93.3%, p < 0.001), and since they felt better after gambling (n = 44, 73.3%, p < 0.001).

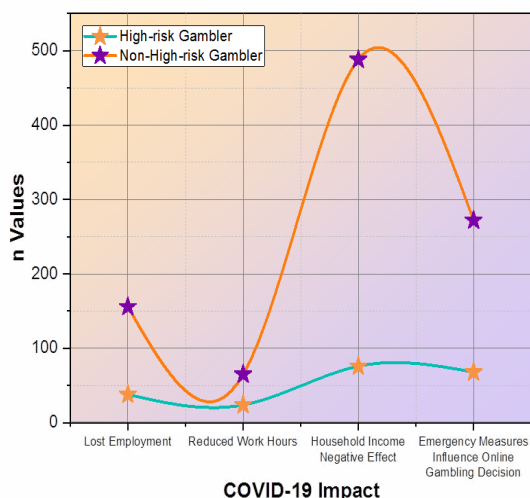
Figure 5 (A) shows GAD-7 and (B) shows COVID-19. High-risk players in the internet population had significant characteristics, including financial consequences associated with COVID-19. Individuals who disclosed job loss (n = 38, 63.3%, p = 0.007) or decreased hours at work (n = 24, 40%, p = 0.001) were more likely to be classified as high-risk gamblers than those professional life was not impacted in this way. There was a higher probability of high-risk gambling among participants who stated that urgent measures affected their choice to bet online (n = 76, 126.6%, p < 0.001).

Figure 6 (A) shows PHQ-9 and (B) shows substance use. The participants with the lowest probability of high-risk gamblers were individuals who were assessed as not having any symptoms of depressive disorders (PHQ-9: n = 15, 25, p < 0.001). Comparably, individuals who received screening for



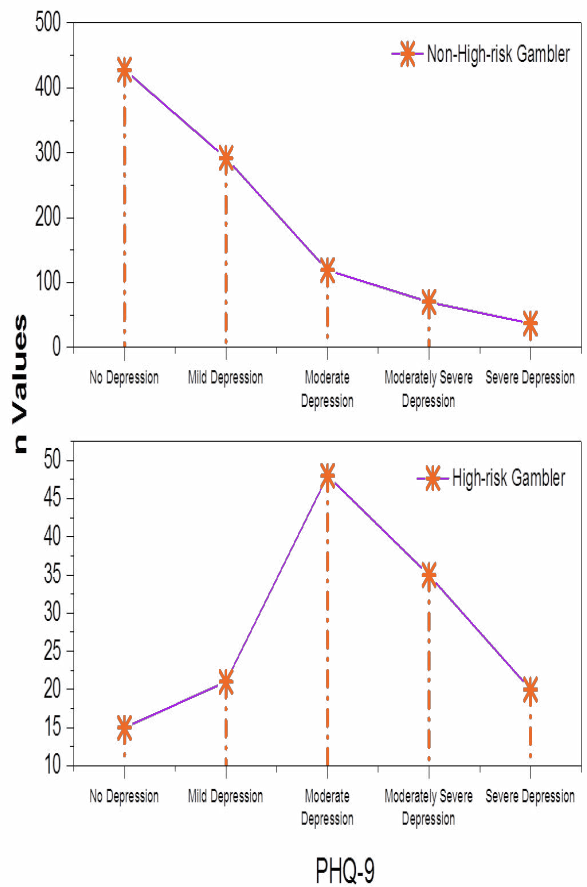
(A)

Figure 5A. GAD-7.



(B)

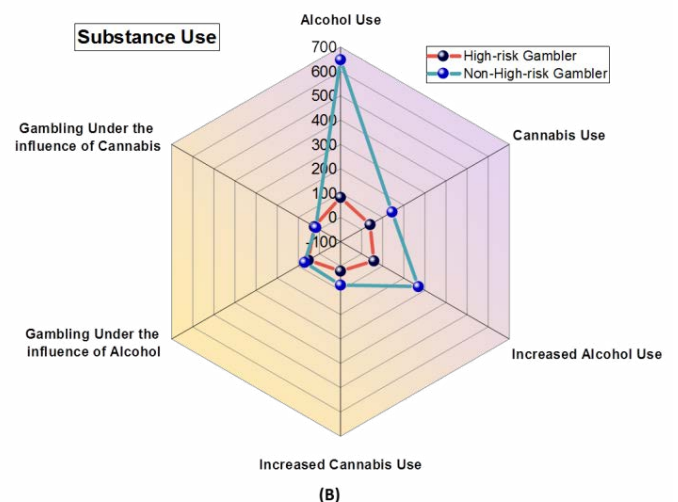
Figure 5B. COVID-19 impact.



PHQ-9

(A)

Figure 6A. PHQ-9.



(B)

Figure 6B. Substance use.

relatively serious depressive disorders (PHQ-9: n = 35, 58.3%, p < 0.001) and extreme depressive disorders (PHQ-9: n = 20, 33.3%, p < 0.001) had odds of dangerous gamblers that were almost five times higher.

Limitations.

The data cannot be used to determine the causal significance of the major connections found because it is a longitudinal online panel. Self-reported habits are susceptible to participant bias, which is a common drawback of survey structures and methodologies. Certain inquiries on the effect of COVID-19 on the economy and addiction were not confirmed, considering the fact that inquiries measuring depression, anxiety, and gambling hazard have been confirmed and proven to be reliable. Additionally, the inclusion of a subset of the Gambling Intentions Questionnaire's confirmed components rather than the full set restricts our ability to comprehend gambling motivations in general and raises the possibility of bias against gaming. In this instance, the goal was to illustrate that the investigation's main focus mental health issues and financial stress have an impact. Therefore, the financial variations created by include the goal to gain income was not present in the entire Gambling Motives Survey and it is especially pertinent to dangerous gambling via the internet.

Considering these limitations, the survey has quickly provided important insights about interpersonal relationships and health-related variables at an important point in the history of humanity that unquestionably deserve more research. As a result, another investigation with the same participants at later date will be conducted. Further investigations will closely monitor any changes in illnesses and behaviours that may arise from the global epidemic from changes in gambling brought by professional athletes returning to play and a general restoration of physical facilities.

Conclusion.

Numerous risk linkages regarding the global financial crisis, gambling danger, psychological issues, and drug use that have been reported in previous investigations have been validated by this investigation. In contrast to a lot of earlier research, this report gives a distinct spotlight on online gambling while taking into account each of these factors simultaneously. Overall, the power of high-risk gambling motivations in identifying online gamblers' dangerous gambling behavior, mental health issues, problems with finances, and risky drug use was an unexpected result. Overall, the results of this investigation are made more significant and important by COVID-19's unique ability to have a major negative influence on health among people because of financial problems, alter social relationships and leisure behaviors. Future research could benefit from example, tracking alterations in Internet gambling practices and associated risk factors throughout the pandemic or examining possible impacts on gambling attitudes and behaviors from the ultimate restoration of physical venues. Understanding these complicated occurrences will require more investigation into the business and administration responses to COVID-19 and gambling damage reduction. As several experts in the field have already noted, administrators should utilize the information gathered from these additional investigations to understand COVID-19's impact on online gambling and related conditions. This understanding will aid them in making informed decisions regarding harm mitigation and prevention.

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