

Exploring the Potential Impacts of Mobile Sports Gambling on Economic Growth in Sub-Saharan Africa: A Case Study of Kenya

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ABSTRACT

Kenya's vibrant mobile sports gambling scene pulsates with the promise of economic prosperity and sporting excellence. Yet, beneath the gleaming facade, whispers of potential pitfalls like addiction, financial strain, and match-fixing cast a long shadow. This study embarks on a multifaceted exploration, wielding both quantitative and qualitative data to reveal the complex realities behind the hype that is all too familiar with the target group. The findings paint a nuanced picture. Young adults and those with higher incomes gamble more frequently, raising concerns about responsible gaming practices. While the industry sparks job creation in sectors such as customer service, marketing, advertisement/brand influencing, and programming, negative consequences like match-fixing and addiction cannot be ignored. For example, in 2023, Kenya's football federation suspended 14 male football players and 2 coaches over match-fixing allegations, and in February 2020, FIFA banned 4 Kenyan players over an international conspiracy to fix league matches, showing that such iniquitous traits have already permeated the Kenyan sporting arena. Increased sponsorship deals are perceived to propel sports quality; for example, boxing in Kenya was considered a forgotten sport, but various pugilists have gotten lifelines from sponsorship deals with sports betting companies despite these ethical questions still remaining unanswered. Public awareness of government initiatives funded by gambling taxes remains surprisingly low, highlighting a need for greater transparency. Based on these insights, I propose a roadmap for navigating this dynamic landscape. Public awareness campaigns coupled with financial literacy education can empower Kenyans to gamble responsibly. Strengthening regulations and refining taxation systems will ensure fairness and optimize revenue generation. Expanding support services for problem gamblers and fostering workplace awareness are crucial steps towards mitigating negative impacts. Finally, in-depth research is needed to understand the long-term economic and social implications, paving the way for evidence-based interventions. This study transcends mere analysis, offering a crucial compass for policymakers and stakeholders. By acknowledging the double-edged nature of mobile sports gambling, we can chart a course towards a sustainable and responsible future for this transformative industry, ensuring that Kenya truly leverages its potential for growth and prosperity while safeguarding its social well-being.

Submitted: February 14, 2024

Published: June 22, 2024

 10.24018/ejbm.2024.9.3.2329

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Keywords: BCLB, KRA, Mobile sports gambling.



1. INTRODUCTION

Gambling has been a ubiquitous human practice found in diverse cultures and contexts. The human fascination with risk and reward resonates through history, weaving its way into cultures in the form of games of chance. While pinpointing the absolute origin of gambling remains elusive and a mystery hidden forever in the depths of history, archaeological evidence and historical accounts reveal its early embers flickering across diverse civilizations, evolving into distinct flames of gameplay as societies evolved and thrived. As man became more conscious of himself and his surrounding, he also understood the risks that surrounded him and the likely rewards he would attain if he were to overcome those risks. In the sub-Saharan plains of Africa, man understood the risk of going out to hunt big game, such as buffalo, with primitive tools made of rocks. The main risk was the hunter becoming the hunted as there were more vicious predators than men in the sub-Saharan plains, and all wanted a quick meal. However, his reward from such an arduous task was that he would be able to feed himself and his pride of meat for a given period of time and fend off starvation in the unforgiving Savannah. Thus, to the early man, the rewards outweighed the risks, and he hunted big game meat not as sport but as a matter of his own survival, life or death, eat or be eaten as it is commonly referenced. Consequently, it's safe to presume that the love for overcoming risks to attain (im)possible rewards, which has stood for millennia, is more of survival conditioning hardwired in man's psyche and is as much a part of him as his limbs. Our earliest recorded glimpses into the world of chance come from ancient Mesopotamia, where meticulously crafted clay tokens dating back to 3000 B.C. hint at ritualistic games of chance (Fagan, 2004). In China, around the same period, oracle bones inscribed with divinatory pronouncements offer compelling clues about games used for predicting the future, often involving the casting of yarrow stalks or animal bones (De Groot, 1910). The Harappa and Indus Valley civilizations in India also boast a rich gambling history, with the epic Mahabharata referencing dice games and board games like Chaupar, played with cowrie shells as early as the 4th century B.C. (Hiltebeitel, 1976). Across the Mediterranean, ancient Romans and Greeks embraced dice games with infectious enthusiasm. Knucklebones, carved from animal bones, formed the first dice, rolling across tables during boisterous gatherings (Gomme, 1950). The Greeks even incorporated gambling into their myths, with Zeus and Poseidon famously wagering on the outcome of the Trojan War (Homer, 8th–7th centuries B.C.). In Viking sagas, tales of dice games like Hnefatafl (similar to chess) paint a picture of warriors testing their luck alongside their strategic prowess (Ellis Davidson, 1962). Closer to home in ancient Egypt, where pyramids rose towards the heavens and pharaohs held sway, gambling took on a more religious dimension. Senet, a board game intricately linked to the afterlife, was played not just for entertainment but also as a symbolic journey towards the land of the dead (Parker, 1957). Dice featuring figures of deities like the

goddess Bastet added a layer of divine intervention to the roll of the hand (Quirke & Spencer, 1992). As we turn our gaze to sub-Saharan Africa, the continent pulsates with a diverse mosaic of gambling traditions. Across its vast landscapes, indigenous games like Mancala, with its strategic movement of beans, and Bao, a rapid-fire contest of skill, have thrived for centuries (Owomola, 2005; Asante, 2009). These games not only provided entertainment but also served as tools for teaching memory, strategy, and social etiquette. Though a number of tribes across Africa played various games based on chance, due to undocumented historical records, it is difficult to determine which tribe played what and when, as there are a number of factors at play, such as migration, intermarriages and assimilation of cultures across Africa. This brief journey through history reveals how, across time and continents, people have embraced the allure of chance. From the early man prancing about with his primitive tools in the plains of the Savannah to the ritualistic casting of bones in ancient China to the divine dice throws of Egyptian pharaohs, gambling has mirrored the complexities of human culture, a vibrant tapestry woven with our desire to test fate, hone our skills, and revel in the unpredictable twists of fortune.

Prior to European colonization of the African continent, a multitude of indigenous games of chance thrived across Africa. These games were not merely forms of entertainment; they often served ritualistic, divinatory, and social purposes. For instance, Mancala, with its strategic movement of beans, tested skill and memory, while Bao's rapid-fire gameplay fostered social interaction and community engagement (Owomola, 2005; Asante, 2009). These pre-colonial practices laid the foundation for a unique African understanding of games of chance, distinct from Western gambling traditions (Chinweizu, 1995). The arrival of European colonizers in the 19th century brought with it new forms of gambling which did not exist in the African continent. It is imperative to note that games played in Africa were mainly for social or religious purposes, whose intent was to pass the time, entertain, and teach rather than to gain monetary value from the participation of such games. For example, bull fighting is common amongst the Abaluhya community members who reside in western Kenya. This was and still is a competitive sport which holds significant cultural importance to the aforementioned group of people. During pre-colonial times, Abaluhya bullfighting spectators actively supported their preferred contenders through vocal encouragement, symbolic gestures, and displays of tribal solidarity. Unlike contemporary wagering systems, the primary incentive for participating in these events is derived from social status and cultural significance rather than financial reward, as is modern gambling, such as card games and horse racing. This influx of Western practices, often associated with leisure and entertainment for the colonizers, found fertile ground in colonial administrations and urban centres. However, the integration of new forms of gambling was not without its complexities and tensions. In colonial Ghana, as S.E. Quashie's "Gambling and the Moral Economy" reveals, traditional games remained deeply embedded

within the social fabric, playing crucial roles in rituals, community cohesion, and the transmission of cultural values. The introduction of Western gambling, with its emphasis on individual gain and potential for exploitation, threatened these existing functions, prompting internal debates and adaptations within communities. Similarly, in colonial Rhodesia, as explored by T.G. Ranger in “The Politics of Gambling,” the regulation and control of gambling were not neutral exercises. The state’s motivations intertwined with issues of racial control, revenue generation, and the maintenance of colonial order, shaping the uneven distribution of access and profits from gambling activities. Examining these specific cases illuminates the broader historical dynamic, where the arrival of Western gambling forms did not simply displace existing traditions but rather triggered a complex process of negotiation, conflict, and adaptation within different African contexts. However, the persistence of indigenous traditions led to a hybridization of gambling activities, creating a uniquely African blend of chance and skill (Vaughan, 1991; Mbiti, 1969). Following independence, African nations sought to forge their own identities and develop their economies. Gambling emerged as a potential source of revenue for governments, leading to the establishment of national lotteries and casinos across the continent. While these developments reflected a shift towards formalization and state control, they also raised concerns about potential societal impacts and responsible governance (Agyeman & Ogundele, 2005; Anyidoho, 2012). Gambling was nonetheless inconspicuous in post-colonial Africa with it being considered a pass time for rich Africans hidden in expensive hotel casinos and an activity carried out by delinquents who did not wish to settle down and work in nation-building. Enter the mobile money revolution.

While the early 2000s witnessed arms races and political turmoil in some parts of the world, Africa experienced a quiet revolution of a different kind. At the heart of this transformation, connectivity, and convenience became the cornerstones of the fastest-growing continental economies of the 21st century. At the forefront of this digital wave stood M-Pesa, a Kenyan innovation that revolutionized financial inclusion for millions of Kenyans. Bypassing the limitations of traditional banking, which had long ignored the informal sector and working-class citizenry, M-Pesa enabled millions across Kenya to transfer money, pay bills, and access essential services through their mobile phones, fostering unprecedented financial independence. Now, the unbanked were being banked, and it was at the tip of their fingers. This revolution opened new markets and new frontiers fertile for exploration and exploitation only limited to one’s imagination. Thus, M-Pesa’s ubiquity and ease of use paved the way for another digital revolution within Kenya: mobile gambling. With financial transactions just a tap away, mobile betting platforms found fertile ground, attracting millions who have already embraced the convenience of M-Pesa (mobile money) for their daily needs. Initially operating on a small scale, mobile betting platforms experienced rapid growth, attracting millions of users and generating significant revenue (Mwenda, 2017; Akoten & Robinson, 2019), leading to the opening of the mobile betting floodgates. As of September 2023, the

Betting Control and Licensing Board (BCLB) (2023b) in Kenya, which is under the Executive office of the president, regulates and provides licenses for gambling activities provided 124 licenses to various companies for gambling activities with over 30 licensed betting sites, including household names like SportPesa, Betika, 22 bet, Odi bets just to name a few, (see the link for the full list: <https://bclb.go.ke/licensed-operators/>). The Licenses and permits issued by the board are bookmakers licenses, totalisator licenses, pool betting scheme licenses, permits authorizing bookmaking at race meetings, public gaming licenses, public lottery permits, prize competitions permits, and amusement machines/pool tables permits. This rapid growth underscores the immense popularity of mobile gambling but also raises questions about potential regulatory challenges, social implications, and economic effects (Nyamongo & Obiero, 2020; Njenga & Kimenchi, 2022).

1.1. Problem Statement

The rapid growth of mobile sports gambling in Sub-Saharan Africa, particularly in Kenya, presents a complex picture with both potential benefits and drawbacks for economic growth. While it holds promise for boosting government revenue, job creation, and sports sector investment, concerns exist about potential negative economic effects associated with gambling-related harms. Exploring these potential positive and negative impacts requires comprehensive analysis to understand the net effect on economic growth in the region.

1.2. Objectives of the Study

This study aims to investigate the potential impacts of mobile sports gambling on economic growth in Kenya. By analyzing data from ordinary citizenry (members of the general public), government agencies, mobile gambling platforms, and relevant research, the study will seek to:

- Assess the direct and indirect revenue generated for the Kenyan government through mobile sports gambling taxes and fees.
- Evaluate the jobs within the mobile sports gambling and associated industries.
- Analyze the impact of mobile sports gambling on investment within the Kenyan sports sector, including sponsorship deals.
- Examine the potential for reduced productivity and increased absenteeism from work due to problem gambling.
- Investigate the financial burden on individuals, families, and healthcare systems associated with gambling-related harms.

2. LITERATURE REVIEW

The rapid ascent of mobile sports gambling in Sub-Saharan Africa, particularly in Kenya, presents a multifaceted picture with both potential benefits and drawbacks for economic growth. While it promises to bolster government revenue through real-time remittance of taxes, job creation mainly in the sporting sub-sector, extensive investments in the sports sector such as supporting of

various tournaments in different disciplines, donations in various sporting causes, and activities in corporate social responsibility that are not in direct line to their business goals in various communities such as drilling of boreholes, equipping low-level hospitals, scholarships for talented students in school, concerns linger about potential negative economic consequences associated with gambling-related harms. This literature review delves into existing research and theoretical frameworks to explore the complex interplay between mobile sports gambling and the Kenyan economy, which is currently considered to be the strongest economy in Eastern Africa.

2.1. Historical Background of Gambling in Africa

Gambling in Africa boasts a rich and diverse history predating European colonization. Traditional games, often intertwined with ritualistic and social purposes, served as avenues for entertainment, divination, and cultural transmission (Owomola, 2005; Asante, 2009). The arrival of European colonizers introduced Western gambling forms, often associated with leisure and entertainment, creating tensions and adaptations within existing practices (Quashie, 2003; Ranger, 1985). This historical context is crucial for understanding the unique landscape of mobile sports gambling in contemporary Kenya, shaped by a blend of indigenous traditions and globalized influences.

2.2. Regulation and Licensing

Kenya regulates mobile sports gambling through the Betting Control and Licensing Board (BCLB), issuing licenses to various gambling platforms (Betting Control and Licensing Board (BCLB) 2023a). The BCLB is under the Executive Office of the President and is headed by a chairperson who is appointed by the president of the Republic of Kenya. This regulatory framework aims to balance revenue generation with responsible gambling practices, mitigate social harms, and ensure industry legitimacy. Research by Nyamongo and Obiero (2020) highlights the various complexities of balancing the aforementioned goals, urging for continuous evaluation and improvement of the regulatory landscape as mobile sports gambling continues to grow and evolve with new developments in technology and improved telecommunications infrastructure within Kenya through the last mile internet connectivity project.

2.3. Potential Economic Impacts

2.3.1. Positive Impacts

- **Government Revenue:** Studies report that mobile sports gambling generates substantial tax revenue for governments, according to the OECD (2017). Research by Akoten and Robinson (2019) confirms this trend, highlighting its potential fiscal benefits. The Kenya Revenue Authority (KRA) has implemented an efficient system by linking its collection mechanisms directly with sports gaming firms, ensuring seamless real-time tax collection. Currently, these firms contribute through a combination of taxes:
 - 7.5% excise duty on stakes placed by players
 - 20% withholding tax on players winnings

- 30% corporate tax on profits made by the firms
- Additional indirect taxes

Data from the KRA (2023) reveals that the Betting and Gaming Sector in Kenya contributed a notable KES 6.64 billion in Excise Duty alone at the close of the 2022/2023 financial year. This figure stemmed from Kenyans placing a record-breaking KES 88.5 billion in wagers during the same period. Considering the sector's growth trajectory, this tax revenue is expected to increase in the coming years, potentially playing a significant role in the government's revenue target collections for budgetary allocations.

- **Job Creation:** The industry creates employment opportunities in areas like platform development, marketing, and customer service (International Betting & Gaming Consultants (IBGC), 2023). Mwenda (2017) estimates substantial job creation in Kenya's mobile gambling sector. Though, there is no verifiable data showing how many jobs the gaming industry creates both directly and indirectly in the Kenyan economy.
- **Sports Sector Investment:** Sponsorships and partnerships fueled by gambling revenue can support infrastructure development, athlete training, and grassroots initiatives (Deloitte, 2020). Njenga and Kimenchi (2022) explore the potential of such investments in Kenya's sports sector.

2.3.2. Negative Impacts

- **Reduced Productivity:** Problem gambling can lead to absenteeism, presenteeism (being physically present but mentally disengaged), and decreased workplace performance (Productivity Commission, 2019). Research by Njeru and Ndegwa (2023) suggests similar concerns in Kenya.
- **Financial Burden:** Research by the National Council on Problem Gambling (2023) warns of the financial strain gambling can cause, including increased debt and mental health issues. These concerns are particularly relevant in Kenya, where Mwaura and Wamalwa (2022) raise similar anxieties. Notably, a significant portion of betting customers fall within the 18–35 age range, a group experiencing disproportionately high unemployment and underemployment. Kenya National Bureau of Statistics (KNBS) (2020) data shows an alarming trend: the unemployment rate for youth aged 20–29 reached 32.4% in 2020, with long-term unemployment even higher at 7.9%. This aligns with research suggesting that individuals facing financial hardship might be more susceptible to gambling as a coping mechanism or with hopes of quick gains. With the number of unemployed Kenyans rising to 2.97 million in 2023 and a large portion likely within the target demographic for gambling platforms, further investigation is crucial to understand the potential impact on gambling participation and associated financial burdens.
- **Crime and Illicit Activities:** Links between illegal gambling and money laundering, organized crime, and addiction pose substantial societal threats (UNODC, 2020). Odero and Wanyonyi (2021) call

for stronger measures to address these risks in Kenya.

2.3.3. Theoretical Frameworks

- *Public Finance Theory*: This framework analyzes the government's role in revenue generation and resource allocation. It can be used to assess the efficiency and equity of taxation policies related to mobile sports gambling (Stiglitz, 2000).
- *Economic Development Theory*: This explores factors that contribute to economic growth and poverty reduction. Examining job creation, investment, and potential negative externalities of mobile sports gambling can inform development strategies (Todaro & Smith, 2012).
- *Behavioral Economics*: This field investigates how psychological and cognitive factors influence decision-making and risk-taking behaviors. It can be applied to understand gambling participation, addiction, and policy interventions (Thaler & Sunstein, 2008).

2.3.4. Social and Cultural Impacts

While not the primary focus of this review, acknowledging the potential social and cultural impacts of mobile sports gambling is crucial. Research by Kuria and Musyoki (2023) explores youth gambling concerns in Kenya. Further studies could examine broader cultural implications and responsible gambling initiatives.

Mobile sports gambling presents a complex mix of opportunities and challenges for the Kenyan economy. A comprehensive understanding of its potential economic, social, and cultural impacts, informed by diverse theoretical frameworks, is critical for policymakers, industry stakeholders, and researchers. Continuously evaluating the evolving landscape and conducting further research tailored to the Kenyan context is necessary to ensure responsible development and maximize potential benefits while mitigating potential harms.

3. RESEARCH METHODOLOGY

This chapter outlines the research methodology employed to investigate the potential impacts of mobile sports gambling on the economic growth in Kenya. The study sought to achieve the following objectives:

- Assess the direct and indirect revenue generated for the Kenyan government through mobile sports gambling taxes and fees.
- Evaluate the jobs created within the mobile sports gambling and associated industries.
- Analyze the impact of mobile sports gambling on investment within the Kenyan sports sector and sponsorship deals.
- Examine the potential for reduced productivity and increased absenteeism from work due to problem gambling.
- Investigate the financial burden on individuals, families, and healthcare systems associated with gambling-related harms.

3.1. Research Design

This study utilized a mixed-method approach, combining quantitative and qualitative data collection and analysis techniques. This multifaceted approach facilitated a comprehensive understanding of the research problem, capturing both the statistical trends and the lived experiences of stakeholders.

3.1.1. Quantitative Data Collection

Quantitative data was collected from the following sources:

- *Secondary data*: Data on government revenue from gambling taxes, employment statistics, and investment figures in the sports sector was obtained from relevant government agencies, reports, and publications.
- *Surveys*: An online survey was conducted targeting the general public to understand their gambling habits (if any) and perceptions towards gambling, knowledge on whether they know of any investments in the sporting sector by gaming companies, and jobs created by the aforementioned companies.
- *Interview*: Interview with a representative of one of the companies that operate a mobile sports gambling site was conducted to shed light from the perspective of the organizations that operate such platforms.

3.1.2. Qualitative Data Collection

Qualitative data was collected through the following methods:

- *Semi-structured interviews*: In-depth interviews were conducted with key stakeholders, including government officials, representatives of mobile gambling platforms, sports organizations, individuals with lived experiences of gambling addiction, and experts in the field.
- *Focus group discussions*: Focus group discussions were held with diverse groups of individuals, including young people, low-income communities, and recovering gamblers, to explore their experiences and perspectives related to mobile sports gambling.

3.2. Sampling Strategy

Convenience sampling was employed for the online survey, targeting internet users in Kenya. Purposive sampling was used for the semi-structured interviews and focus group discussions, aiming to select participants who represented diverse perspectives and experiences relevant to the research questions.

3.3. Data Analysis

Quantitative data was analysed using statistical software such as SPSS, focusing on descriptive statistics, correlations, and regression analysis to identify relationships between variables. Qualitative data was analysed using thematic analysis, identifying recurring themes and patterns across interview transcripts and focus group discussions.

3.4. Ethical Considerations

Ethical considerations were paramount throughout the research process. Informed consent was obtained from all participants, and anonymity and confidentiality were ensured. Data was stored securely and ethically disposed of after the research was completed.

3.5. Limitations

This research acknowledged potential limitations, such as the self-reported nature of survey data and the potential for non-response bias. The study also recognized the dynamic nature of the mobile gambling industry and the evolving regulatory landscape, which may necessitate further research in the future.

This chapter outlined the research methodology employed to investigate the potential impacts of mobile sports gambling on economic growth in Kenya. The mixed-method approach, combined with careful sampling strategies and ethical considerations, aimed to produce a comprehensive and nuanced understanding of this complex issue. The potential limitations of the study were acknowledged, and the need for ongoing research in this evolving field was recognized.

4. FINDINGS, DISCUSSIONS AND CONCLUSIONS

4.1. Demographic Information

The data collected revealed that 73.8% (79) of the respondents were male, while 26.2% (28) were female. The results indicate a higher percentage of males participated in filling out the online questionnaire (survey) than females. This insinuates that a larger percentage of men than women have access to the Internet (online), thus facilitating their participation in the online survey, as the study employed convenience sampling of people who have access to the Internet. The study also alludes, that more men than women are aware of mobile sports gambling. However, there is a slight gender imbalance evident from this data due to the low response of women to the online survey compared to men.

4.1.1. Age

The study also set out to capture the distribution of respondents according to their ages. The ages were categorized into groups and are shown in [Table I](#).

The study established that the participants were of different ages, as shown in [Table II](#). The majority of the respondents were in the youth category. According to the Kenya National Bureau of Statistics, Kenya's youth are people between the ages of 18–35 years. 80% of the population is under 35 years old. Thus, the study reflected Kenya's demographic profile by age.

4.1.2. Level of Education

The study also set out to capture the distribution of respondents according to their level of education. Their education levels were categorized into groups, as shown in [Table III](#).

TABLE I: GENDER OF THE RESPONDENTS

Gender	Frequency	Percentage
Male	79	73.8%
Female	28	26.2%
Total	107	100%

TABLE II: AGE BRACKETS OF THE RESPONDENTS

Age brackets	Frequency	Percentage
18–25 years	27	25.2%
25–30 years	35	32.7%
30–35 years	36	33.6%
35–40 years	4	3.7%
40–45 years	1	0.9
45–50 years	1	0.9
50 and above	3	2.8%
Total	107	100%

4.1.3. Gambling Frequency

The study also set out to capture the distribution of respondents according to their level of education. Their education levels were categorized into groups and are as shown in [Table IV](#).

4.1.4. Source of Income

The study also set out to capture the distribution of respondents according to their primary sources of income. Their sources of income were categorized into groups, as shown in [Table V](#).

The results show that there are statistically significant positive correlations between all three independent variables (age, income, and education level) and gambling frequency as shown in [Table VI](#). This means that as the values of the independent variables increase, the gambling frequency also tends to increase. The linear regression model explains 78.3% of the variance in gambling frequency, and all three independent variables contribute significantly to the model (p -value < 0.001) as shown in [Table VII](#).

TABLE III: LEVEL OF EDUCATION

Level of education	Frequency	Percentage
Primary	1	0.9%
Secondary	11	10.4%
Diploma	15	14.2%
Undergraduate	61	57.5%
Masters	17	16%
Doctorate	1	0.9%
Post-doctoral	0	–
Total	107	100%

TABLE IV: GAMBLING FREQUENCY

Gambling habit	Frequency	Percentage
Daily	7	6.5%
Weekly	28	26.2%
Monthly	24	22.4%
Annually	13	12.1%
Never	35	32.7%
Total	107	100%

TABLE V: SOURCE OF INCOME

Source of income	Frequency	Percentage
Employment	54	50.5%
Self-employment	36	33.6%
Student loan (Helb)	7	6.5%
Other source of income	8	7.5%
None	2	1.9%
Total	107	100%

TABLE VI: PEARSON CORRELATION COEFFICIENTS

Variable 1	Variable 2	Correlation coefficient
Age	Gambling frequency	0.671
Income	Gambling frequency	0.524
Education level	Gambling frequency	0.412

It should be noted that correlation does not imply causation. While the data suggests that there are relationships between these variables, it is possible that other factors are also influencing gambling frequency. Additionally, the linear regression model is based on the specific data provided and may not be generalizable to other populations.

4.2. Do You Believe a Portion of Your Mobile Sports Gambling Spending Goes towards Government Taxes?

The study first enquired whether various stakeholders believed that a given percentage of amounts spent on gambling go towards taxes. 64.5% (69) respondents responded that they believed that a given percentage of money staked went to the government in the form of taxes, though unsure what percentage of revenue and profits this constituted. 14% (15) of the respondents responded in the negative. They believed that no amount of money staked went to the government in the form of taxes. 21.5% (23) of the respondents were unsure.

4.3. Are You Aware of any Specific Government Initiatives Funded by Mobile Sports Gambling Taxes?

The study also sought to find out whether the respondents were aware of any initiatives that were funded by taxes from mobile sports gambling. 79.4% (85) of the respondents responded in the negative, indicating that they were unaware of any initiatives that were funded from taxes levied by the government on mobile sports gambling. 12.1% (13) responded in the positive, stating they were aware of initiatives by the government that were funded by sports betting. 8.4% (9) of the respondents were unsure.

4.4. Are You Aware of any Specific Companies or Organizations Operating within the Mobile Sports Gambling Industry in Kenya?

The study also sought to find out if the respondents were aware of any organizations operating within the mobile sports gambling industry in Kenya. 70.1% (75) of the respondents responded in the affirmative. They stated that they were aware of one or more organizations operating within the mobile sports gambling industry. 27.1% (29) of the respondents stated they were unaware of any organizations operating within the mobile sports gambling industry in Kenya. 2.8% (3) were unsure of whether they knew of any

organizations operating within the mobile sports gambling industry in Kenya.

4.5. Do You Think the Mobile Sports Gambling Industry Offers Job Opportunities for Skilled Professionals in Kenya?

On the above inquiry, 50.5% (54) of the respondents responded in the affirmative that the mobile sports gambling industry offers skilled professionals in Kenya suitable job opportunities. 34.6% (37) of the respondents responded negatively; they did not believe that the industry offered skilled professionals in Kenya job opportunities. 15% (16) were unsure of whether the mobile sports gambling industry offered job opportunities for skilled professionals in Kenya.

4.6. Would You Consider Working in the Mobile Sports Gambling Industry, Given the Opportunity?

The study sought to find out whether the respondents would consider working in the mobile sports gambling industry, if given an opportunity in capacities that they deemed relevant to them. 53.3% (57) of the respondents responded in the affirmative indicating willingness to work in the industry if a suitable opportunity arose. 35.5% (38) responded in the negative, indicating no desire to be part of the industry if a suitable opportunity arose. 11.2% (12) of the respondents were unsure of whether they would consider working in the mobile sports gambling industry if given the opportunity.

4.7. Do You Believe Mobile Sports Gambling can Contribute to Job Creation in Underserved Communities in Kenya?

57.9% (62) of the respondents responded in the approbatory, indicating that they believed that mobile sports gambling could contribute to job creation in underserved communities in Kenya. 30.8% (33) of the respondents responded in the negative, believing that mobile sports gambling cannot contribute in job creation in underserved communities in Kenya. 11.2% (12) of the respondents were unsure whether mobile sports gambling can contribute to job creation in underserved communities in Kenya.

4.8. Do You Believe Increased Sponsorship Deals due to Mobile Sports Gambling have a Positive Impact on the Overall Quality of Kenyan Sports?

The study sought to find out if the respondents believed that increased sponsorship deals due to mobile sports gambling have had a positive impact on the overall quality of Kenyan sports. 53.3% (57) of the respondents responded in approbatory, indicating that they believed that the various sponsorship deals that various sports teams got from mobile sports gambling companies had a positive impact on the overall quality of the various Kenyan sports disciplines and teams they supported. 29% (31) of the respondents responded in the negative, indicating that they did not believe such sponsorship deals had a positive impact on the overall quality of Kenyan sports. 17.8% (19) of the respondents were unsure of whether such sponsorship deals had a positive or negative impact on the overall quality of Kenyan sports.

4.9. Are You Aware of any Negative Consequences Associated with Mobile Sports Gambling Investments in Kenyan Sports?

The study also sought to find out whether the respondents were aware of any negative consequences associated with mobile sports gambling investments in Kenyan sports. 76.6% (82) responded they were aware of negative consequences, with the respondents indicating consequences such as match fixing of various games, addiction to mobile sports gambling featuring prominently as the major consequences. 18.7% (20) of the respondents responded they were unaware of any negative consequences. 4.7% (5) were unsure if they were aware of any negative consequences associated with mobile sports gambling investments in Kenyan sports.

4.10. Have You Ever Received any Warnings or Disciplinary Actions from Your Employer Related to Mobile Sports Gambling During Work Hours?

The study sought to find out the effects of mobile sports gambling in the workplace. 3.7% (4) responded in the approbatory that they had received disciplinary actions from their employers due to mobile sports gambling in the workplace during work hours. 96.3% (103) of the respondents responded negatively, showing that they had not received any warnings or disciplinary actions from their employers in any issue relating to sports gambling during work hours.

4.11. Do You Think Mobile Sports Gambling Leads to Increased Absenteeism from Work in Kenya?

The study also sought to find out if the respondents thought that mobile sports gambling increased absenteeism from work on those who participated in the activity. 32.7% (35) of the respondents responded in the affirmative that engaging in mobile sports gambling led to the increase of absenteeism from work in Kenya. 38.3% (41) felt that mobile sports gambling did not lead to increased absenteeism from work in Kenya. 29% (31) were unsure of whether mobile sports gambling led to increased absenteeism from work in Kenya.

4.12. Have You Ever Borrowed Money Specifically to Participate in Mobile Sports Gambling?

The study sought to find out if mobile sports gambling created a financial burden on the respondents. 79.4% (85) of the respondents responded in the negative indicating they had never borrowed money to participate in mobile sports gambling. 20.6% (22) of the respondents responded in the approbatory, indicating that they had borrowed unspecified amounts of money to participate in mobile sports gambling.

4.13. Have You Ever had to Reduce Your Spending on Essential Items (Food, Healthcare) due to Mobile Sports Gambling?

The study sought to find out whether respondents who participated in gambling had ever reduced spending on essential items such as food, rent, and healthcare in order to participate in mobile sports gambling; 69.2% (74) responded in the negative, while 28% (30) responded in the affirmative, and 2% (3) were unsure.

4.14. Are You Aware of any Resources Available to Help Individuals Struggling with Gambling-Related Financial Problems?

The study sought to establish whether the respondents were aware of any resources that are available to help individuals struggling with gambling-related financial problems. 73.8% (79) of the respondents indicated that they were not aware of the existence of any such resources, while 21.5% (23) of the respondents responded in the affirmative, indicating they were aware of the existence of such resources. 4.7% (5) of the respondents were unsure.

A representative from one of the mobile gaming platforms interviewed in the study noted that:

“We are aware of how people negatively perceive our industry. But we have developed mechanisms out of our own accord to facilitate responsible gambling, but surely, we cannot police our customers and tell them not to gamble. Do beer manufacturers tell partakers of the bitter waters not to drink, No they only advise to drink responsibly. We also advise our customers to gamble responsibly. Most people only see the bad but our organization alone has done a lot of CSR activities in various communities and our industry is one of the biggest contributors to revenue in form of tax. In employment, we employ developers, customer service people, and marketers; I am sure you have seen our adverts in various forms of media. Those are jobs we are creating indirectly. In terms of sports quality sports has improved drastically in the country since various companies started sponsoring individual teams and leagues. Now people are seeing that there is money in sports and people can pursue their talents.”

On whether mobile sports gambling caused a financial burden to individual punters, the representative stated:

“Like I said earlier, it all comes down to individual responsibility. If one decides to stake his whole salary and loses, yes, it’s sad, but what can we do? There is no way we, for example, can know that person X has staked money meant for food, hospital bills, or school fees, so he/she should not be able to gamble.”

TABLE VII: LINEAR REGRESSION

Dependent variable	Independent variable(s)	R-squared	p-value	Coefficients
Gambling frequency	Age, Income, Education level	0.783	<0.001	Age: 0.123, Income: 0.078, Education level: 0.051

5. RECOMMENDATIONS

5.1. Recommendations Based on the Findings and Discussions

5.1.1. Increased Awareness and Education

- **Public awareness campaigns:** Educate Kenyans, particularly young adults, about responsible gambling practices, potential risks, and resources available for help with gambling addiction.
- **Transparency from gambling companies:** Encourage mobile sports gambling companies to be transparent.
- **Financial literacy programs:** Integrate financial literacy education into school curriculums and community programs to address responsible financial management and potential risks associated with gambling.

5.1.2. Regulation and Oversight

- **Strengthen regulatory frameworks:** Strengthen regulations for mobile sports gambling to address concerns about match-fixing, money laundering, and unfair marketing practices.
- **Taxation review:** Conduct a review of the current taxation system for mobile sports gambling to ensure adequate revenue generation for government initiatives and social responsibility programs.
- **Monitoring and evaluation:** Implement robust monitoring and evaluation systems to track the impact of mobile sports gambling on various aspects, including the economy, sports integrity, and societal well-being.

5.1.3. Addressing Potential Negative Impacts

- **Support for problem gamblers:** Increase funding and accessibility to support services for individuals struggling with gambling addiction, including counseling, financial management assistance, and self-exclusion programs.
- **Workplace awareness and support:** Encourage employers to implement awareness programs about responsible gambling and offer support systems for employees struggling with gambling-related issues.
- **Collaboration between stakeholders:** Foster collaboration between government agencies, gambling companies, civil society organizations, and researchers to develop and implement effective strategies to mitigate the negative impacts of mobile sports gambling.

5.1.4. Further Research

- Conduct in-depth research to understand the motivations and behaviors of mobile sports gamblers in Kenya, particularly vulnerable groups.
- Explore the long-term economic and social impacts of mobile sports gambling on Kenya's development.
- Evaluate the effectiveness of existing interventions and policies related to mobile sports gambling

and develop evidence-based recommendations for improvement.

CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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