



Examining the effects of online sports betting on the perceived economic wellbeing of student-athletes

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ABSTRACT

The aim of the study was to investigate the effects of online sports betting on the perceived economic wellbeing of student-athletes using the regression analysis with an interaction effect used to test the effect of demographic variables on the relationship between dependent and independent variables. Correlation analysis was used to test the relationship between independent variables. The findings reveal that there was a positive and significant association³ between gambling severity and economic wellbeing. The study revealed that students' sports bet online with large amounts of money to get the feeling of excitement. Sports betting leads to overspending which can disrupt home life to such an extent that it has some social effects such as the break-up of families. Sometimes due to sports betting the only deceptive course of action that seems to remain too often may lead the bettor to commit suicide.

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Introduction

The rise of betting company's may be attributed to digital sports betting exceeding most other types of gambling and concentrating on the "young market" (Gainsbury et al., 2014; Benson et al.; 2021). The internet sports industry is utilized by anybody at any moment, any place, and in any way, with the young being the most active users (Hing, Russel, Lamont & Vitratas 2017). Lawn, Oster, Riley, Smith, Baigent & Rahamathulla (2020). During the COVID-19 pandemic in 2020 live professional matches were negatively affected but this positively impacted the online gambling market and which was expected to register a Compound Annual Growth Rate (CAGR) of approximately 4.7%, but the figure is forecast to grow to approximately 47.1 billion to USD 106.25 billion by 2025 posting a CAGR of nearly over 11.9% (Statista, 2019). According to Zion Market Research (2018) the projected global mobile market has about 165 million subscribers by 2018, up from a 2013 projection of 65 million. Online sports' betting, in particular, is the only gambling area in which participation has increased over the past decade (Gainsbury, 2015; Håkansson, 2020; Benson et al.; 2021). These increases have been supported by widespread advertising for online sports betting during a live and broadcast sporting event, as well as via contemporary media like the internet, social networks, and cellular phones (Gainsbury, Hing, Delfabbro, & Kings, 2014). It is alleged that online sports betting has a high level of exposure and different people have a diverse perception of its consequences on student-athletes' social-economic life, mental health, and academic life and has been identified as a booming business (Zion Market Research 2018).

Mwandime (2017) suggested that rather than being based on supply, the granting of permits to sports betting companies and facilities should be based on demand. Furthermore, it was recommended that, although sports' betting has certain good economic benefits, the market price of the betting must always be considered, Mwandime also noted that no online gambling permission should be granted until the inflationary effect outweighs the social cost. As a result, any decision to allow online gambling should be predicated on a

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cost value assessment (Lawn, Oster, Riley, Smith, Baigent, & Rahamathulla 2020) the analysis should be based on the consequences of future generation, the university youth.

Taking cognizance of the financial impact of online sports betting can help to reduce economic damage such as indebtedness, financial restrictions, and the abuse of college fees, among many other things (Ahaibwe, Lakuma, Katunze, & Mawejje, 2016; Binde 2016). Despite earning subsidies and overcoming physical and psychological difficulties at colleges, the total cost-benefits of digital sporting betting remain debatable (Gilgunn, 2010). Binde (2011) said that virtually every teenager's sports bettor has the anticipation of gaining online gambling and growing wealthier; they believe that via their online gambling encounters, they would one day recoup all of the revenue they could have wasted to online games betting (Benson et al.; 2021).

Finances spent on betting cannot be spent by the individual or the family elsewhere in the local economy. The perceived social effects of online sports betting on individual student-athlete and the immediate society are more challenging to quantify than the perceived economic effects. (Yi & Kanetkar, 2010). This is mainly because of three reasons. These include, limited quality data on perceived social effects of online sports betting. Two the complications of identifying and quantifying perceived social effects. Three, the difficulty of finding a cause-effect relationship between online. Sports betting and social problems are due to the difficulty of isolating any one factor that causes social problems; where the interplay is huge and difficult to differentiate. In addition, the perceived social effect of online sports betting may cause individuals and families misery. It is also likely to cause mental health problems to student-athletes (Laursen, et al, 2016). The impact of online sports betting's widespread availability, promotion, and legalization has been recognized as a major public health and addiction issue (Shaffer & Korn, 2002; Benson et al.; 2021).

Previous studies have identified harmful financial aftermath among gamblers as the most noticeable effect of online sports betting. The likelihood of sports bettors engaging in the game of chasing their loss is high. This behaviour cannot deter betting but rather it fuels it, thus it leads to accrued debt. (Griffith, Wood, Parke & Parke, 2007). Students' athletes are at risk from other financial obligations such as increased spending from tuition and other university expenses. This led to increased debts, irresponsible borrowing and misuse of tuition fees among others. (Griffith, Wood, Parke & Parke, 2007). Moreover, the financial disadvantages include decreased savings, loans, debt, missed payments, and a common feeling of doing without them (Taylor et al. 2001, MacDonald, McMullan & Perrier 2004, Productivity Commission, 2010; Benson et al.; 2021).

Consequently, Losch, Cornish, Sundin, Heiden, Park, Avery, & Lutz (2013) carried out a pilot study of Gambling attitudes and behaviour. The study was conducted at the Center for Social and Behavioral Research (CSBR) in two Iowa institutions. The study evaluated an online quantitative survey and a qualitative focus group of questions. On money spent, won and lost while betting online, the study indicated that. Roughly one-half of student-athletes who reported online betting in the earlier year indicated that they used less than \$25 on betting annually, while 19%, specified having spent between \$25 and \$50. Moreover, 12% delineated to have spent \$51 to \$100 and only 20% who indicated to have spent more than \$100 on betting over annually. Another consideration is that three-fourths of UNI respondents in the study long-established they lost cash during at least one of the last three times they participated in online sports betting (74%). Consistently, 26% confirmed not to have lost cash during any of their last three online betting undertakings. Though, 38% did not indicate to have won any money during their last three sports online betting endeavors. The most of student sportsmen who acknowledged gambling over the previous year, lost or earned \$50 or less in a particular day. On the other hand, some students reported that the largest amount of cash they had bet with, won, or lost was more than \$500 (Losch, Cornish, Sundin, Heiden, Park, Avery, & Lutz, 2013)

The university youth are heavily engrossed in betting which has caused them economic turmoil and problems like debts to the extent that some have used their college fees in betting without returns. There are more and more college students that participate in internet sport betting, with more college athletes than non-athletes in these statistics. The gambling ruins university students, with the excessive online sports betting makes them bankrupt (Koross, 2016; Benson et al.; 2021). Repeated betting causes anxiety, migraine and insufficient sleep, which both impacts student athletes' social and mental lives. Consequently, they build isolation notions from friends and family. This isolation situation has the effect of causing the students to miss from class, which may impair their academic achievement.

The competition mentality of student-athletes, "No pain, no profit," may lead them to decrease in their search for assistance on the perceived impact of internet gambling. According to Chumba (2019) these students involved in sports are seen as the face of success in college life, thus because of their supposed abilities, knowledge and expertise in various sports they are susceptible to the hook of online sports betting; in the process drugging other students into this venture.

To investigate the effects of online sports gambling/betting on the perceived economic wellbeing of student-athletes

Research Methodology

The present study used a cross-sectional survey research design. The target population was 74 publicly and privately universities in Kenya recognised by the Commission for University Education. A total of 38 institutions, 19 of which were public and 19 of which were private universities were sampled. Random sampling was employed for the selection of games officials, sports patrons and the Dean's students' of the sampled institutions. There were a total of 38 games officers.

Table 1 Summary of the Sample Size

Universities category	Universities sampled	Athletes sampled	Sports office from sampled universities
Public	50% (37) =19	½ of 385 =193	50% (37) =19
Private	50% (37) =19	½ of 385=192	50% (37) =19
Sample	38	385	38
	Total respondents' sample	423	

The researcher used self-reporting questionnaire, key informative interview schedules and an observation protocol. The data was coded and analysed using the SPSS version 25 programme. The data was analysed and coded. Cross-tabulation was utilized to arrange and aggregate information for descriptive statistics which include proportions means and frequency patterns.

Regression analysis with an interaction effect was used to test the effect of demographic variables on⁶¹ the⁶¹ relationship⁶¹ between⁶¹ dependent and independent variables. Correlation analysis was used to test the relationship between independent (extent of online sports betting) and dependent variable (Economic well-being).

Findings

Descriptive results for Gambling Severity

The research analyzed the frequency of gambling severity practices which in the form of the betting amount exceeding loss one can cope with, betting large amounts of money, gambling to cover bet loss, borrowing money for betting, anxiety challenges of betting, criticism of other individuals towards betting, and experience of guilt towards betting. Illustrations are as per Table 2.

Table 2: Descriptive results- gambling severity

Item	Mean	Std. Dev
How long have you sports bet online more than you could really afford to lose	1.2205	1.13112
How often have needed to sports bet online with larger amounts of money to get the same feeling of excitement	1.4044	0.93223
When you sports bet online, how often have you gambled another day to try to win back the money you lost	1.5846	1.0274
How often have you borrowed money or sold anything to get money to sports bet online	1.4596	1.06184
How often have you felt that you might have a problem with online sports betting	1.6111	1.05634
Are you aware of any student athlete who has any health problems, including stress or anxiety	1.5474	1.07908
Have you ever criticized your friends' online sports betting or told you that you had an online betting problem, regardless of whether or not you thought it was true	1.5018	0.95534
Are you aware of any financial problems caused by online sports betting for you, your friend or your household	1.6444	1.00901
How often have you felt guilty about the way your friend's sports bet online or what happens when they sports bet online	1.8869	1.08856

The findings show respondents sometimes sports bet online more than they could afford to lose as shown by the mean of 1.22 and the standard deviation of 1.13. The respondents revealed that sometimes they have needed to sports bet online with larger amounts of money to get the same feeling of excitement with a mean of 1.40 and the standard deviation of 0.93. The mean of 1.58 and SD of 1.02 reveals that the respondents often have gambled another day to try to win back the money they previously lost. The majority of respondents sometimes have borrowed money or sold something to get money to sports bet online as revealed by mean of 1.45 and the standard deviation of 1.06. The respondents often indicated that there are times they have felt that they might have a problem with online sports betting, with a mean of 1.61 and the standard deviation of 1.05.

Majority indicated that students are aware of other student athletes who have health problems, including stress or anxiety due to betting as per mean of 1.54 and standard deviation of 1.07. The respondents indicated most of the times have criticized their friends' online sports betting or friends told them that they had an online betting problem, regardless of whether they thought it was true with a mean of 1.50 and the standard deviation 0.95. The mean of 1.64 and SD of 1.01 reveals that the respondents most times are aware of financial problems caused by online sports betting for their colleagues or households. The respondents most times have felt guilty about the way their friend's sports bet online or what happens when they sports bet online, as shown by the response mean of 1.88 and the standard deviation is 1.08.

Table 3: Gambling severity

	Frequency	Percent
Not Problematic	13	4.5
Problematic	215	75.2
Seriously Problematic	46	16.1
Total	274	95.8

The findings reveal that the majority of the students who sport bets online are problematic (75%), 16% of the students in online betting are seriously problematic whereas 5% of the students are not problematic. The findings show that the rates of online sports betting among the students who participate are problematic due to addiction.

Descriptive results for economic well-being

The research analyzed economic well-being practices due to gambling in the form of betting amount exceeding intended amount, gambling to cover bet loss, borrowing money for betting, spending tuition money for betting and intention to reduce money spent on betting. Table 4 illustrates this argument.

Table 4: Descriptive Results- Economic Wellbeing

Item	Mean	Std. Dev
Have you ever sport betted online more than you intended	1.0294	1.15539
How often did you go back online to sports bet try to win back the money you lost	1.5224	0.94585
How often have you ever loaned money or thought of peddling something to sports bet online	1.5316	0.99059
Have you ever intended to use money meant for tuitions to sports bet online	1.5277	1.02477
Have you ever intended to reduce the amount of money you spend on online sports betting	1.6882	1.06368

Most respondents indicated that sometimes they have sport betted online more than they intended, with a mean of 1.02± 1.15. Majority indicated that most times they did go back online to sports bet try to win back the money they lost as per response mean of 1.54± 0.94. The respondents indicated that most of the times they have loaned money or thought of peddling something to sports bet online with a response mean of 1.53± 0.99. The mean of 1.52± 1.02 reveals that the respondents most times have intended to use money meant for tuitions to sports bet online. The respondents most times have intended to reduce the amount of money they spend on online sports betting, as shown by the response mean of 1.68± 1.06.

From the interviews conducted among the students’ athletes, most of them indicated that they spend on average an equivalent of US \$ 5 to 10 on weekly basis. The respondents further noted that the financial effects of betting include financial challenges and over-spending as students aim to get more money to bet. Most respondents indicated that the betting online affects other society members through consistent borrowing from the gamblers to get their finances for betting online.

Effect of online sports betting on the economic wellbeing of students

The study assessed the effects of online sports betting on the economic wellbeing of students. Correlation and regression analysis was done to test the relationship between online sports betting on economic wellbeing factors. General linear modeling was conducted to test the interaction of respondents’ demographics on the relationship between online sports betting on economic wellbeing (Benson et al.; 2021)

Relationship between Gambling Severity and economic wellbeing of student athletes

A correlation coefficient of zero is an indicator of the non-existence of a linear relationship between two continuous variables while a correlation coefficient of -1 or +1 indicates a perfect linear relationship. The stronger the correlation between variables, the closer the correlation coefficient comes to ±1. Pearson correlation was used in this analysis.

Table 5: Correlation between Gambling Severity and economic wellbeing

		Gambling severity	Economic effect
Gambling severity	Pearson Correlation	1	.600**
	Sig. (2-tailed)		0.000

The findings reveal a positive and significant association between online gambling severity and poor economic wellbeing (r = 0.600, P>0.0001). This implies that online gambling severity factors have led to poor economic wellbeing of students.

Regression analysis was done to determine the influence of gambling severity on the economic wellbeing of students. Results were presented in Table 6.

Table 6: Model Summary of Gambling Severity and Economic wellbeing

R	R Square	Adjusted R Square	Std. Error of the Estimate
.500a	0.25	0.246	0.53131

The results in Table 6 presented the fitness of model of regression model. The coefficient of determination that is the R square was 0.25. This shows that online gambling severity explains 25% of poor economic wellbeing of students. This also implies that 75% of the variation in the poor economic wellbeing of students is attributed to other variables not captured in the model.

Table 7 shows the ANOVA model analysis of the relationship.

Table 7: ANOVA for gambling severity and economic wellbeing

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	22.167	1	22.167	78.526	.000b
Residual	66.621	236	0.282		
Total	88.788	237			

The ANOVA results indicated that the model was statistically significant. This was supported by an F statistic of 78.526 and the reported $P > 0.0001$. The results implied that online gambling severity is a significant predictor of poor economic wellbeing state of students.

Table 8: Coefficients of Regression for Gambling Severity and Economic Wellbeing

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.362	0.128		2.825	0.005
Gambling severity	0.711	0.08	0.5	8.861	0.000

Regression of coefficients results revealed that students' online gambling severity and poor economic well-being are positively and significantly related ($\beta = 0.711, P > 0.0001$). Therefore, the resultant equation is

$$\text{Economic wellbeing} = 0.362 + 0.711(\text{gambling severity}) + e$$

Hypothesis testing

The interaction effect of demographic factors on the relationship between gambling severity and students' economic and wellbeing was assessed and findings presented.

Table 9: Hypothesis Testing of Gambling Severity and Economic Wellbeing with Interaction

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	36.222a	108	0.335	2.167	0.001
Intercept	1.281	1	1.281	8.276	0.006
v.S1.1 * v.S1.2 * v.S1.3 * v.S1.4 * v.S1.5 * v.S1.6 * v.S1.7 * Problem Gambling	36.222	108	0.335	2.167	0.001

a R Squared = .791 (Adjusted RSquared= .426)

The findings reveal that the interaction effect of demographic factors on the relationship between gambling severity and economic wellbeing of student athletes had an F-value of 2.167. The R Squared value was 0.791 (with demographic factors interaction) greater than 0.25 (without interaction). The demographic factors interaction effect was significant (p-value =0.001). Therefore, the option was to reject the null hypothesis. This implies that demographic factors have a significant interaction effect on gambling severity and economic wellbeing relationship.

The study revealed that the interaction between the extent of online sports betting and the demographic variables on the perceived economic wellbeing of student-athletes are significant. This implies that the demographic background of a student has an effect on the sports betting practices and thus the economic wellbeing thereof. Griffith, Wood, Parke and Parke (2007) noted that students engaging in the game of chasing their loss is high. This behaviour cannot deter betting, but rather it fuels it, thus it results in accrued debt. It has been reported that financial losses are a crucial feature of online betting which leads to reduced savings, credit issues, debt, missed payments and a general sense of doing without. MacDonald, McMullan, and Perrier (2004) indicated that the likelihood of suffering under debt is one of the greatest known consequences of online sports betting. The study revealed that students' sports bets online with large amounts of money to get the feeling of excitement. Sports betting leads to overspending which can disrupt home life to such an extent that it has some social effects such as the break-up of families and in its last stage the only deceptive course of action that remains is all too often to think of committing suicide or completing the ideation. The study revealed that students are most often aware of financial problems caused by online sports betting for their colleagues or households. Students have often gambled on other days to try to win back the money they previously lost. Stuhldreher et al. (2007) in a study noted the predictability that problem gamblers in treatment or rehabilitation have high rates of accrued debt, financial losses bring in relationship breakdown among other stressors.

Conclusions

The study revealed that student's sports bet online with large amounts of money to get the feeling of excitement. Sports betting leads to over spending which can disrupt home life to such an extent that it has social effect such as break-up of families and in its last stage the only deceptive course of action that remain may all too often lead the bettor to committee suicide. The study revealed that students are most times aware of financial problems caused by online sports betting for their colleagues or households. Further, students often have gambled on subsequent days to try to win back the money they previously lost. According to the report, the impact of online sports betting on students' social lives includes social negligence, disconnectedness from society and peers, tensions and crime, and online sports betting obsession. Bankruptcies caused by internet gambling, crime, and corruption, as well as the time spent by athletes playing online gambling rather than with their significant others. To fund their betting addiction and fill the loss void, a limited number of online sports bettors will turn to illicit practices. For student-athletes, the repercussions entail disciplinary prosecution, fines, incarceration, and the loss of their education.

With sports betting becoming more accepted within our society and within universities settings; with sports betting and becoming an accepted culture within students – especially the athlete fraternity; there is a need for strategies to educate the students on the harm as a result of addictive gambling on their economic progress through campaigns especially to students.

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