

AN INVESTIGATION OF AWARENESS OF GAMBLING CONSEQUENCES AMONG STUDENTS IN UNIVERSITIES IN KERICHO COUNTY, KENYA

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Abstract

This study investigates the awareness of gambling consequences among university students in Kericho County, Kenya. It aims to determine the level of awareness, identify hindrances to understanding these consequences, and explore effective methods for creating awareness. The findings will inform educational interventions to promote responsible gambling practices within the academic community. 7 Students presenting with gambling problems and 3 university counsellors were recruited using snowballing and census methods respectively. Semi structured interviews were used to gather data and thematic analysis approach used in analysis. Three themes were gleaned from the data. It was observed that the level of awareness of gambling consequences among students in universities is relatively low. Counselling services offered in universities create general awareness of consequences of behavioural disorders such as gambling but fails to point out the nitty-gritties of negative gambling consequences. Hindrances to awareness of gambling consequences include influences from social media and students' environment. More gambling management programmes including peer counselling, sensitization talks and life skills training are required. This article offers insights into an understanding of the role of awareness of gambling consequences in management of gambling among students in universities. Understanding the role of awareness of gambling consequences can assist counsellors in coming up with effective and student-centred counselling services. The findings of the study will help universities to reevaluate the focus of their gambling approaches to emphasize on the harmful consequences of gambling. The study encourages open conversations around gambling through peer counselling and support groups as a way of creating awareness of gambling consequences. The findings also add to the existing knowledge on the importance of diversifying gambling approaches to include life skills training, entrepreneurship programmes and a stricter monitoring of students' participation in awareness programmes.

Key words: Gambling consequences, students in universities, peer group influences, gambling, thematic analysis; counselling.

Introduction

A lot has been documented on gambling among students in universities worldwide. The rising fascination of gambling among students in universities in Kenya is alarming, and has precipitated an outcry not only among parents but also to universities and society at large (Sanga, 2017). This has informed strategies that various universities have proposed to curb the ever-rising gambling behaviour among students. However, little has been done to explore the role of awareness of gambling consequences, yet this has the potential to lower the rate of gambling among students in universities.

Gambling is now one of the most frequently reported behavioural challenger among students in universities. Over the past decade, gambling has received considerable research attention due to a high prevalence of gambling-related problems reported among students in universities (UNESCO, 2017). A study by Jaehyun et al. (2021) in Korea shows that the number of students in universities with gambling related problems has increased from 4.0% in 2015 to 4.9% in 2020. Among the nations in the sub-Saharan Africa, Kenya is leading with the number of youths engaging in gambling behaviour and students in universities form the bulk (GeoPoll, 2017). Statistics show that at least 12 million Kenyans gamble every month, with majority being the youth in universities (Mwadime, 2017).

Gambling is widely regarded as an acceptable social form of recreation among the youth. However, it can be both addictive and problematic with serious negative effects (Lungu, 2020). Among students in universities, gambling comes with dire consequences

including poor academic performance, truancy, financial problems, depression, suicide, low self-esteem, deterioration of social relationships, and substance abuse (Machoka, 2020). In Kenya, study reveals that gambling is now one of the most frequently reported behavioural addictions among the youth (Mwadime, 2017). The study area, Kericho County in Kenya, has reported cases of a university student committing suicide after losing a bet, and other students dropping out of university after using their fee money to bet. Students in universities who gamble find it difficult to cut off from gambling behaviour and indulge regardless of harm done to self or loved ones. The excitement, thrill and anticipated financial benefits from gambling are some of the triggers that lure students in universities into gambling activities which exposes them to such gambling related problems (Calado et al., 2020). Some students make a lot of sacrifice to actualize their gambling urge. Gambling environment also exposes students in universities to anti-social peer groups, which may in turn lead them to more behavioural problems. Derevensky and Gilbeau (2015), however, note that these gambling related problems often go unnoticed, unlike other behavioural problems like alcoholism and drug abuse which can easily be measured and their effects noted.

Gambling management strategies in universities such as preventive counselling services, life skills training and peer support programmes are expected to create awareness of gambling consequences among students (Calado et al., 2020). Counselling services and programmes offered in universities are important in addressing erroneous beliefs about gambling

and cognitive biases including overconfidence in ability to identify systems of winning, beliefs that attitudes or behaviours can influence gambling outcomes, and tendencies to recollect wins and not losses (Ladouceur et al., 2015). Previous literature, however, indicates that such gambling management services and programmes fail to address the nitty-gritties of gambling consequences among students in universities. Moreover, most of the counselling techniques used to manage gambling among students in universities have been extrapolated from adults to the young ones (Essau and de la Torre-Luque, 2021). There is need, therefore, for studies that focus on developing gambling management strategies aimed at addressing the problems and challenges that students in universities encounter in gambling.

Lack of awareness of gambling consequences leaves students in universities more exposed to the triggers for gambling such as influence from social media, peer group influences and risky gambling behaviours (Machoka, 2020). Lungu (2020) suggests that university counsellors are supposed to inform students on the rate at which gambling activities are increasing and the negative gambling consequences. During the process of counselling, students should be encouraged to adopt better ways of making money and healthy ways to escape from life stressors rather than gambling. Students in universities who have received education, preventive counselling services and information about responsible gambling practices are supposed to have higher levels of awareness of gambling consequences. Rather than gambling, these students would venture into other activities

that bring them money such as small businesses and work-study in the university.

Awareness of gambling consequences among students in universities can be facilitated through education and information dissemination about responsible gambling practices and the potential risks associated with excessive gambling (Calado et al., 2020). McBride and Derevensky (2016) indicate that rational emotive education (REE) is important in creating awareness of emotional distress caused by irrational beliefs in gambling among students in universities. Rational emotive education targets to enhance emotional strength by allowing irrational beliefs about gambling to be replaced by rational beliefs. Education and awareness strategies typically cover a broader scope of themes, including the enhancement of self-esteem and self-image, the development of interpersonal skills to better cope with stressful life events, the development of problem-solving and decision-making skills, and the development of skills for resisting influence from students' surrounding environment (Williams et al., 2012; Derevensky, 2015).

In Kenya, universities are required by law to make available centres and qualified personnel to help students who encounter mental health challenges like gambling. Preventive counselling services such as peer counselling, sensitization talks and life skills training are employed in dealing with gambling among students in universities (Obebo, 2019). However, gambling behaviour is still high among students in universities (Koross, 2016). There are doubts, therefore, if gambling management services and programmes in universities create awareness of gambling

consequences among students. This study's aim was to examine the role of awareness of gambling consequences in management of gambling among students in universities in Kericho County, Kenya. This study was guided by three objectives: to determine the level of awareness of gambling consequences among students in universities, to identify the hindrances to awareness of gambling consequences among students in universities, and to determine ways of creating awareness of gambling consequences among students in universities.

Methodology

Theoretical Framework

This research adopted Self-Determination Theory (Ryan and Deci, 2017). This is a psychological framework that emphasizes that a behaviour is based on personal interests, values and influences from the surrounding environment. The paradigm also states that individuals are the determinants of their own behaviours. This implies that students in universities have the ability to make choices and manage their own life when it comes to activities like gambling. However, such decisions are influenced by the degree of awareness of gambling consequences among them. The theory states that being self-determined means that you are in greater control of your own behaviour, as opposed to being non-self-determined, which means that your behaviour is controlled by others. This therefore means that upon receiving counselling services and becoming aware of gambling consequences, students in universities should make personal decisions to either gamble or not. This theory

provides mechanisms of understanding the role of awareness of gambling consequences in management of gambling among students in universities. The theory states that people choose to behave due to values and behaviours they learn from others. This implies that awareness of gambling consequences created among students by counselling and other gambling management services and programmes can influence the students' choice to either gamble or not. It also explains that even though counselling services and programmes offered in universities may inform students of gambling consequences, it is every student's sole responsibility to make a choice to gamble or not. The students are the determinants of their own behaviours.

Study Locale and Sample

The locale of this investigation was the Kericho County in Kenya where study report indicates high rise in gambling behaviour and gambling related problems among the students in universities (Koross, 2016). The study's target population included students presenting with gambling problems and university counsellors from a selected university in Kericho County: University of Kabianga. Study report indicates that a student in University of Kabianga in Kenya committed suicide after losing a bet, and several other students have dropped out of university as result of gambling. Students presenting with gambling problems were sampled through snowballing strategy, while census was used to recruit counsellors from the university. The researcher relied on the University Dean of Students office to identify at least one student with gambling problems who helped recruit others. The general criteria used

in selection of the sample were: participants had to be student gamblers whose records were with the university dean of students and had been observed for a 12-month period, and must have exhibited common features including restlessness or irritability when attempting to cut down or stop gambling, and had made repeated unsuccessful efforts to control, cut back, or stop gambling. Data was collected using structured interview schedules.

Rigour and Ethical Consideration in the Research

The researcher endeavoured to fulfil all requirements to ensure rigour during the design, collection of data and analysis of data. Credibility was ensured through a technique of member checking. Participants were involved in the verification process. Participants crosschecked any possible misrepresentations of their points raised during the interview. To ensure dependability, the researcher maintained a record of decisions made during the study and kept notes on each aspect of the study process. To ensure transferability of this study, the researcher provides details of the context in which the study occurred and the assumptions that are central to the study. The researcher allowed participants to review and confirm the accuracy of their findings to enhance confirmability.

The respondents gave consent for participation after being told of the study's aim and assured of confidentiality and anonymity and their right to refuse participation in this study. Ethical clearance was obtained from the University of Kabianga and the National Commission for Science, Technology and Innovation

(NACOSTI). Thematic analysis approach was used to analyse data.

Results and Discussion

Level of Awareness of Gambling Consequences

The level of awareness of gambling consequences among students in universities is quite low despite counselling services and other gambling management strategies in place. This is attributed to factors such as influences from social media, peer group influences and influences from the surrounding environment of a student. This assertion is augmented by the interview extract below;

Benefits from gambling such as winnings and even the family members or friends who have become millionaires due to gambling may make students in universities ignore gambling consequences. Lastly, influence from social media may also make university students ignore gambling consequences. (Counsellor#1)

Most of the counselling services offered in universities to manage gambling behaviour among students do not majorly focus on creating awareness of gambling consequences. Rather, their main focus is on the time which students waste while gambling, which could be useful for their studies. This assertion is captured as stated below;

Counselling in the university only stresses on the time spent in gambling by students but not the serious negative effects of gambling such as gambling addiction, depression, financial challenges poor social relationships among students. (Student#5)

The above findings are in contrary to Lungu's (2020) argument that counselling services offered in universities are supposed to inform students on the rate at which gambling activities are increasing and the negative gambling consequences. This could be the reason as to why gambling remains high among students in universities despite counselling services offered in universities. The findings also justify the low level of awareness of gambling consequences among students in universities despite counselling services and programmes in place.

Some students join university when they are already aware of gambling consequences. They however do not take the consequences seriously since gambling has been perceived as a normative behaviour in the society. This was captured by a university counsellor who had had an opportunity to interact with first year students during orientation as stated below;

Some students join university already aware of gambling consequences. However, they do not take them seriously because the society, including universities, rarely condemn gambling activities. Some may be aware about gambling consequences but they may not feel that the same can happen to them. (Counsellor#2)

The findings are supported by the study's theory, Self-Determination Theory (Ryan and, 2017), which argues that students in universities have the ability to make personal choices or decisions and manage their own life when it comes to activities like gambling. However, such choices or decisions regarding gambling are influenced by the degree of awareness of gambling consequences among the students.

The findings therefore show that creating awareness of the potential problems that students encounter in gambling is crucial in management of gambling behaviour among students in universities. The higher the awareness of gambling consequences the lower the gambling behaviour among students.

Hindrances to Awareness of Gambling Consequences

The decision to engage in gambling among students in universities is more of intrinsic than extrinsic. As indicated by one of the participants, this makes it difficult for one to know whether a student is gambling or not. In addition, majority of students who gamble may not want anyone to know of their gambling status as they consider gambling a personal affair. This is captured in the interview extract below;

It is quite difficult to tell whether a student is gambling or not. This is because gambling is regarded as a personal affair and no student gambler would want the university to know about their status. (Student#4)

This therefore means that it is difficult to know whether the number of students who are aware of gambling consequences is high or low, unless the students share their status with others.

A counsellor asserted that students in universities experience a lot of negative gambling consequences. However, influences from social media and the surrounding environment such gambling peers and family members make them forget such consequences very fast. After some time of gambling, students get addicted. This has caused them their

academics and social relationships. This is captured in an interview as indicated below;

Gambling has a lot of negative effects. You will get used to it and eventually become addicted. Benefits from gambling such as winnings and even the family members or friends who have become millionaires due to gambling may make students in universities ignore gambling consequences. Lastly, influence from social media may also make university students ignore gambling consequences. (Counsellor#3)

Another counsellor enumerated the negative outcome that students who gamble encounter. Most of it have potential to completely affect the students' academic journey as captured below:

Many students have missed exams in the university because they used fees to gamble. Some also end up differing courses or exams. Another problem with gambling is addiction. Some students fail to attend lectures, do assignments, cats and end semester exams because they watch games and place bets. Some, normally undergo depression after losing all the money for upkeep in gambling. Some also experience deterioration in their performances in academics and also in social relations with their families and lecturers. (Counsellor#1)

The study findings show that students in universities who gamble become so engulfed in gambling that they cease to exist as socially functional human beings. Students in universities who gamble find it difficult to cut off from gambling and indulge regardless of harm done to self or loved ones.

The study findings are supported by Machoka (2020), who notes that students in universities

who are addicted to gambling are not able to control their gambling behaviour even when they know that their actions are hurting them as well as others.

The study findings indicate that students should participate in counselling services and programmes conducted in universities in order to become aware of gambling consequences. However, this is not the case for many university students. A counsellor noted that only a few students participate in counselling services and programmes meant to create awareness of gambling consequences in the university. This therefore means that the remaining majority are unlikely to become aware of gambling related issues addressed in such programmes. This was captured in the interview as stated below;

Counselling creates awareness of gambling consequences to only those students who seek it. The number is relatively small. Other programmes like sensitization workshops, orientation, and lectures on gambling (life skills training) have been important for reaching a reasonable number of students and making them aware of gambling consequences. However, not all students attend such events. (Counselor#3)

This implies that counselling services alone are insufficient to address gambling problems among students in universities. The study therefore suggests that other interventions need to be explored, other than counselling.

The above claims are supported by Essau et al. (2021), who indicate that there are no specific strategies that have been empirically validated to manage gambling among the youth. Essau et al. explain further that existing counselling

techniques for managing gambling among students in universities have been extrapolated from adults to the young ones. This explains why gambling among students in universities increases despite counselling services offered in the universities.

Ways of Creating Awareness of Gambling Consequences

The study notes that while providing counselling services, counsellors ought to go to an extent of giving relevant stories and examples on gambling consequences such as cases of students with gambling addiction, suicidal ideations and suicide cases. Such examples will enhance the memory of the students on gambling related problems. This is captured well in the interview extract below;

Counselling services offered in the university should create awareness of gambling consequences by explaining and giving relevant examples of people who are addicted, and those who have committed suicide as a result of gambling. (Student#7)

University lecturers should support the counselling department in fighting gambling problems among students. They can do so by advising students in classes to manage their money especially HELB loan properly and not to use it in gambling. This was captured by a student who had opportunity to have had lecturers who cared about their financial literacy;

During classes, some lecturers advise students to utilize their money effectively, more so HELB loan. They normally warn us about gambling using HELB loan which might be the only source

of income for some in the university. There is also counselling department in the university that makes students aware of some problems associated with gambling such as anxiety of losing or winning, and how students can economize the little they have to sustain them throughout a semester. (Student#3)

A student indicated that in the university, they get advised and encouraged to venture into other business opportunities within the campus other than gambling. These assertions are captured below;

The university employs preventive measures like encouraging students that instead of gambling, they can start up small businesses like selling clothes and other stuff at student centres or canteens to generate income. The university counselling department also talks with students about awareness of negative consequences of gambling during orientation. (Student#6)

Another student felt that such pieces of advice and encouragement should be provided during orientation of First Years, sensitization talks and peer counselling programmes as stated below;

Programmes like sensitization workshops, orientation of First Years, and lectures on gambling (life skills training) should be avenues for reaching a reasonable number of students and making them aware of gambling consequences. (Student#4)

A counsellor suggested that introduction of more common courses for all students in universities to learn and internalize life skills should be considered. Such courses will help reach those students who may not get a chance to attend programmes such as orientation of First

Years and sensitization talks, which are meant to create awareness of gambling consequences in the university. This is captured in the abstract below;

The university should introduce more common courses such as CCP 102: Life skills, for all First Years. Such like courses will help create awareness of gambling consequences among those students who do not attend orientation and other counselling programmes in the university. (Counsellor#1)

Another counsellor stressed on strengthening peer counselling programmes among students by the university management. This strategy can be one of the best ways through which students can promote awareness campaign on gambling consequences amongst themselves. This is captured below:

The university should promote and strengthen peer counselling programmes such as a Fourth Years' programme dubbed "Living Testimony" whereby fourth year students create awareness among continuing students about life experiences in the university, including gambling related problems (Counsellor#2)

The above findings are supported by Igadwah (2019) who states that in universities, preventive counselling services such as peer counselling and life skills training should be employed in dealing with gambling motivation among students.

The findings in this study are augmented by previous literature. The study findings indicate that majority of the participants felt that the level of awareness of gambling consequences among students in universities is still low despite

gambling management strategies in place. This is supported by Essau et al. (2021) who note that gambling management strategies fail to address the nitty-gritties of gambling consequences among students. In addition, most of the counselling techniques used to manage gambling among students in universities have been extrapolated from adults to the young ones. The study also indicates that influence from social media and that from the surrounding environment of students are the major hindrances to awareness of gambling consequences among students in universities. This is supported by Calado et al. (2020), who note that gambling environment exposes students in universities to anti-social peer groups, which may in turn lead them to more behavioural problems. The last common view among the participants was that in creating awareness of gambling consequences, preventive counselling services play a significant role alongside other gambling management strategies. This assertion is supported by Lungu (2020), who asserts that counselling services offered in universities are important for creating awareness on gambling consequences among students, hence influence their attitudes towards gambling behaviour.

Conclusion

This study was designed to explore role of awareness of gambling consequences in management of gambling among students in universities in Kericho County. Three themes were gleaned from the study findings: level of awareness of gambling consequences, hindrances to awareness of gambling consequences, and ways of creating awareness

of gambling consequences. The study findings indicate that majority of the participants felt that the level of awareness of gambling consequences among students in universities is still low despite counselling services offered. The study attributed this to a number of factors including peer group influences, influences from social media and the surrounding environments of students. Such influences as winnings from gambling by friends, relatives and daily draws over televisions make students underestimate the dire consequences of gambling. Another reason for low levels of awareness of gambling consequences among students in universities was found to be the “ineffectiveness” of counselling techniques used among students in universities. The study indicates that counselling services and programmes employed in universities fail to address the nitty-gritties of consequences of gambling among the students. Universities therefore need to finetune gambling approaches to address the specific issues affecting student gamblers. The study notes that poor participation of students in gambling management programmes such as peer counselling, sensitization talks, life skills training classes and orientation of First Years is a major factor. Universities therefore should employ strict measures to ensure that students participate in all services and programmes offered to manage gambling in the university. The study also indicates that influences from social media and that from the surrounding environment of students are the major hindrances to awareness of gambling consequences among students in universities. Many participants indicated that they are surrounded by friends and relatives who have become millionaires as a result of gambling.

This makes it difficult for them to practice all that they have learnt in management of gambling. Students’ environments, both in campus and outside campus, should be checked. Many student gamblers do not want anyone to know of their gambling status as they consider gambling a personal affair. This is a hindrance to awareness of gambling consequences among the students. It makes it difficult for university counsellors to know the correct number of students engaged in gambling and those experiencing gambling problems such as addiction and depression. Programmes such as peer counselling, life skills training, orientation of First Years and sensitization workshops are indicated to have shown some success in creating awareness of gambling consequences among university students. They however reach only a small number the student population. This study emphasizes the need of expanding these programmes and ensuring broader participation by making them mandatory for all students.

Implications and Recommendations for Gambling Control Policies

Despite the existing counselling services and programmes aimed at addressing gambling in universities, students still show low awareness of gambling consequences. The study attributes the low awareness to influences from social media, peer pressure and family members who view gambling as a positive activity due to past successes, and focusing of counselling services much on time management rather than awareness of gambling consequences. The findings of the study will help universities to reevaluate the focus of their gambling approaches to emphasize on its harmful

consequences. The study findings will also help university counsellors to design awareness campaigns that counterbalance the glamorization of gambling from social media or success stories from the students' surrounding environments. The study highlights the importance of universities' collaborating with social media influencers and reshaping peer narratives concerning gambling in dismantling its perceived normality.

The study indicates that university students consider gambling as a private affair and therefore they may not disclose the challenges they experience or their gambling status to others. This negatively affects the designing and development of appropriate intervention strategies for individual gamblers. The study may help inform universities of the importance of encouraging open conversations around gambling behaviour through peer counselling and support groups. This will be important in creating awareness of gambling consequences to as many students as possible.

Counselling services alone have been found to be insufficient in addressing gambling problems among students in universities. The study adds to the existing literature on the importance of diversifying gambling approaches to include life skills training, entrepreneurship programmes and a stricter monitoring of students' participation in awareness programmes.

Programmes such as peer counselling, life skills training, orientation of First Years and sensitization workshops are indicated to have shown some success in creating awareness of gambling consequences among university students. They however reach only a small

number the student population. This research emphasizes the importance of expanding these programmes and ensuring broader participation by making them mandatory for all students.

References

- Berdaliyeva, A.S., Kim, A.I., Seraliyeva, A.M., Gassanov, A. A., & Dunentayev, M. V. (2023). Criminological measures to counteract corruption offences in the field of illegal gambling. *Journal of Financial Crime*, 30(1), 4-23.
- Calado, F., Alexander, J., & Griffiths, M. D. (2017). Prevalence of adolescent problem gambling.
- Calado, F., Alexandre, J., Rosenfeld, L., Pereira, R., & Griffiths, M. D. (2020). The efficacy of a gambling prevention program among high-school students. *Journal of Gambling Studies*, 36, 573–595.
- Canale, N., Griffiths, M. D., Vieno, A., Siciliano, V., & Molinaro, S. (2016). Impacts of Internet gambling on problem gambling among adolescents in Italy: Findings from a large-scale nationally representative survey. *Computers in Human Behavior*, 57, 99–106.
- Corney, R., & Davis, J. (2010). The attractions and risks of internet gambling for women: A qualitative study. *Journal of Gambling Issues*, 24, 121-138.
- Cowley, E., Briley, D. A., & Farrell, C. (2015). How do gamblers maintain an illusion of control? *Journal of Business Research*, 68, 2181-2188.

- Derevensky, J., & Gilbeau, L. (2015). Adolescent gambling: Twenty-five years of research. *Canadian Journal of Addiction/Le Journal Canadien d'Addiction*.
- Essau, C. A., & de la Torre-Luque, A. (2021). Parent's psychopathological profiles and adolescent offspring's substance use disorders. *Addictive Behaviors*, 112, 1066112. <https://doi.org/10.1016/j.addbeh.2020.106611>
- Gainsbury, S. M. (2015). Forex trading addiction: The relationship between internet gambling and disordered gambling. *Current Addiction Reports*, 2, 185. <https://doi.org/10.1007/s40429-015-0057-8>
- Geopoll. (2017). A survey on mobile gambling among youths in Sub-Saharan Africa. *Geopoll Survey Reports*.
- Grant, L. D. (2020). *Cognitive biases and gambling* (Doctoral dissertation, Southern Cross University).
- Harrison, G. W., Lau, M. I., & Ross, D. (2020). The risk of gambling problems in the general population: A reconsideration. *Journal of Gambling Studies*, 36(4), 1133-1159.
- Igadwah, L. (2019). Matiang'i fires warning shot as bets push over 500,000 youths into debt. *Business Daily Africa*. Retrieved from <https://www.businessdailyafrica.com>
- Jaehyun, J., Kim, M., Ko, S., Jung, M., Han, J., & Seo, B. (2021). Effect of stress, impulsivity, peer attachment and social interest on gambling behavior. *The Korean Journal of Food & Health Convergence*, 7(2), 11-24. <https://doi.org/10.13106/KJFHC.2021.VOL7.NO2.11>
- Jenkinson, R., Sakata, K., Khokhar, T., Tajin, R., & Jatkar, U. (2020). Gambling in Australia during COVID-19. *Australian Gambling Research Centre*.
- Johnson, R. A., & Bhattacharyya, G. K. (2019). *Statistics: Principles and methods*. John Wiley & Sons.
- Kenya National Bureau of Statistics. (2018). *A report on economic survey and state of youth unemployment in the country*.
- Killick, E. A., & Griffiths, M. D. (2021). Why do individuals engage in in-play sports betting? A qualitative interview study. *Journal of Gambling Studies*, 37(1), 221-240.
- Koross, R. (2016). University students gambling: Examining the effects of betting on Kenyan university students' behaviour. *International Journal of Liberal Arts and Social Sciences*, 4(8).
- Ladouceur, R., Goulet, A., & Vitaro, F. (2013). Prevention programmes for youth gambling: A review of the empirical evidence. *International Gambling Studies*, 13(2), 141-159. <https://doi.org/10.1080/14459795.2012.740496>
- Lungu, C. T. (2020). Gambling among Nigerian youths; Implications for counselling. *International Journal of*

- Research and Scientific Innovation*, 8, 179–183.
- Machoka, F. (2020). *Effect of problem gambling on behaviour among students in selected universities in Nairobi, Kenya*. Daystar University, School of Human and Social Sciences.
- McBride, J., & Derevensky, J. (2016). Gambling and video game playing among youth. *Journal of Gambling Issues*, 34, 156-178.
<http://dx.doi.org/10.4309/jgi.2016.34.9>
- Molinaro, S., Benedetti, E., Scalese, M., Bastiani, L., Fortunato, L., Cerrai, S., (2018). Prevalence of youth gambling and potential influence of substance use and other risk factors across 33 European countries.
- Morvannou, A., Monson, E., Savard, A. C., Kairouz, S., Roy, É., & Dufour, M. (2020). “It did not apply to me”: Poker players’ perspectives of prevention messages. *Canadian Journal of Public Health*, 111, 617-626.
- Mwadime, A. (2017). *Implications of sports betting in Kenya: Impact of robust growth of the sports betting industry*. Master’s thesis, United States International University Africa.
- Njonge, T., & Ronoh, T. K. (2022). Influence of gambling on the psychological wellness of young people in Njokerio village of Nakuru County, Kenya. *Edition Consortium Journal of Psychology, Guidance and Counseling*, 4(1), 266-278.
- Nulty, D. D. (2018). The adequacy of response rates to online and paper surveys: What can be done? *Assessment & Evaluation in Higher Education*, 33(3), 301-314.
- Obebo, M. (2019). Matiang’i vows to end betting business in the country. *The Star*. Retrieved from <https://www.the-star.co.ke>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press.
- Sammut, M. (2010). *The prevalence of gambling among university students: With a focus on internet gambling* (Unpublished master’s thesis). University of Malta.
- Sanga, B. (2017, September 5). How betting machines are turning children into daily gamblers. *Standard Digital Entertainment*. Retrieved from <https://www.sde.co.ke>
- Sansanwal, R., Derevensky, J., Todiritti, R., & Lupu, V. (2015). Knowledge and attitudes regarding adolescent problem gambling: A cross-cultural comparative analysis of Romanian and Canadian teachers. *International Journal of Mental Health and Addiction*, 13, 33-48.
- Sharp, C., Dellis, A., Hofmeyr, A., Kincaid, H., & Ross, D. (2015). First evidence of comorbidity of problem gambling and other psychiatric problems in a representative urban sample of South Africa. *Journal of Gambling Studies*, 31(3), 679–694.

<https://doi.org/10.1007/s10899-014-9469-y>

- Ssewanyana, D., & Bitanihirwe, B. (2018). Problem gambling among young people in sub-Saharan Africa. *Frontiers in Public Health*, 6, 23.
<https://doi.org/10.3389/fpubh>
- Toneatto, T. (2016). Single-session interventions for problem gambling may be as effective as longer treatments: Results of a randomized control trial. *Addictive Behaviors*, 58-65.
- Toneatto, T., Bagby, R. M., Vachon, D. D., Bulmash, E. L., Quilty, L. C., & Costa, P. T. (2007). Pathological gambling and the five-factor model of personality. *Personality and Individual Differences*, 43, 873–880.
- Tong, K.K., Hung, E.P., Lei, C. M., & Wu, A.M. (2018). Public awareness and practice of responsible gambling in Macao. *Journal of Gambling Studies*, 34(4), 1261-1280.
- UNESCO. (2020). *Global education monitoring report, 2020: Inclusion and education: All means all*. UNESCO.
<https://unesdoc.unesco.org/ark:/48223/pf0000373718>
- Williams, R. J., West, B. L., & Simpson, R. I. (2012). Prevention of problem gambling: A comprehensive review of the evidence, and identified best practices. Retrieved from
<http://hdl.handle.net/10133>