Predictive Factors for Gambling and Prevalence of Problematic Gambling Among Students in Selected Public Universities in Kenya

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Abstract

Problem gambling is an emergent psychosocial as well as public health issue. Problem gambling behaviour causes interference and disruption in key domains of life; psycho-social, emotional relationships as well as physical. Gambling disorder is mainly marked and characterized by problem gambling behaviour that causes significant afflictions and distress in one's life. The first objective of this study was to find out whether gender, socio-economic status, peer influence and acute stress are predictive factors for gambling. The other objective was to examine prevalence of problematic gambling among the subjects. This growth is navigated by increasing affirmation of legal gambling. In spite the fact that problem gambling among university students is a global public health issue, few studies have established its magnitude among university students in Kenya. The study was anchored on social learning theory and cognitive behaviour theory. There is need to identify predictive factors and inclinations as well as prevalence rates of gambling among university students. The target population was students in Kisii university. The researcher applied descriptive quantitative research design. Data was obtained from a researcher generated social demographic questionnaire. Respondents were screened for problem gambling using gambling anonymous inventory. The unit of analysis was 576 students from Psychology department. Data was purposively collected from a sample of 152 university students from Kisii University. Respondents who were aged 18-20 and 21-22 years were 44% respectively while those who were 23-25 years and above were 9.9%, in addition those who were aged above 26 years were 3.2%. The data was analyzed using SPSS version 25. Furthermore, the data was also analyzed using descriptive and inferential statistical techniques and the results were presented in form of tables and figures. The proportion of respondents with problem gambling was high among male as compared to female students. The results of this study showed that male gender is a risk factor for gambling. Further, the respondents whose socio-economic status was low (78%) were more involved in problem gambling compared to those in medium and high socio-economic status. The study induced that low-social economic status is a predictive variable for gambling. Also, the results of this survey revealed that peer influence and extent of gambling are significantly related. This was supported by a chi square of 8.723 and p value of 0.013<0.05. This implied that peer influence is a significant predictor of gambling. Also, the findings showed that stress and gambling are significantly related. This was supported by a chi square of 11.084 and p value of 0.004<0.05. This implied that stress is a significant predictor of gambling. In terms of gender, 48 male respondents (31.57%) had problem gambling, only 4 female respondents (2.63%) had problem gambling. The current study underscored the need to focus on problem gambling which could negatively impact on the psychological well-being of university students. The findings of this study may also help mental health practitioners to develop interventions that can address problem gambling among students.

Keywords: Problem Gambling, University Students, Predictive Factors, Public Health, Well-Being

INTRODUCTION

Gambling had not been a major challenge in Kenyan universities before mid-1990, but now, it is a pressing problem which calls for research and deeper understanding. Tabri (2017) indicates that young people suffering from economic and psycho-social challenges consider gambling as panacea for their day-to-day difficulties. The young people especially from tertiary institutions engage in betting at the expense of their education. University students are vulnerable to gambling, as joining tertiary institutions comes with a lot of freedom and fewer restrictions. It is important to do a study on problem gambling since it has adverse and far-reaching ramifications on university students' life. Research shows that young people are at a higher risk for problem gambling behaviour that causes significant affliction and distress (Shenassa, Paradis, Dolan, Wilhelm, & Buka, 2012). Identifying individual and environmental predictive factors will provide a formidable basis for responsible gambling strategies. This paper examined predictive factors for problem gambling among university students in a public university in Kenya.

The term 'problem gambling' includes but is not limited to gambling disorder (Marotta, Bahan, Reynolds, Vander Linden, & Whyte, 2014). There is a clear distinction between gambling disorder and problem gambling. Gambling disorder is a condition that was previously known as pathological or compulsive gambling. It is characterized by lack of self-control in spite of far-reaching negative consequences such as restlessness and irritability when attempting to stop (Frascella, Potenza, & Brown, 2014). Research shows that some forms of problem gambling have components of addictive disorder, falling under the category of either mental or behavioural health (Frascella, et al., 2014).

The most frequent motivations reported by adolescent problem gamblers were gambling to escape and inability to resist temptations (Dowling et al., 2017). People generally engage in gambling in order to escape from problems, stress, depression and also anxiety (Calado, & Griffiths, 2016). Problem gambling can be seen as a maladaptive coping strategy used to handle unpleasant feelings (Blaszczynski et al., 2016). Researchers have also noted that they are biologically related variables that can account for gambling behaviour such as craving and lack of self-control (Gainsbury et al., 2015; Marshall et al., 2017).

Studies show that youth generally show higher problem gambling prevalence rates than adults (Orford, 2011). The young people are currently growing in a society where gambling is a norm.

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Gambling is widely accepted, available and also advertised both in print and electronic media (Minkkinen et al., 2016). Shin. et al. (2015) concluded that environment may facilitate the young people to engage in gambling without well thought consideration. Abdi et al. (2015) argued that high poverty level, unemployment, underemployment especially among the youth has led to the increasing levels of gambling in Africa.

Problem gambling is a game of chance that disrupts one's life by spending too much money and time (Corina, 2010). It is a repetitive gaming and betting despite harm and negative consequences (Moore, 2016). Gambling is an industry that people engage in on regular basis with no adverse consequences (Chiu & Storm, 2010), hence gambling is fun and a hobby to many people. A significant minority of the young adults whose gambling is maladaptive causes adverse effects on their lives (Buckle, Dwyer, Duffy, Brown, & Pickett, 2013). Gambling is generally divided into three categories: i). Wagering and betting; placing a bet or wager on the outcome of an event such as sporting or race. ii.). Gaming which involves placing bets on games that are constrained by mathematically determined rules, such as gaming machines and casino table games. iii). Lottery style games including cross-lotto, power ball which award prizes based on the section of winning symbols or numbers of combination (Tang & Oei, 2011)

Gambling is wagering of money or something of value referred as the "stakes" on an event with an uncertain outcome with the primary intention of winning of money or material goods (Abdi, 2015). The term "problem gambling" refers to broader classification of individuals who have developed some challenges with gambling but may not fulfil diagnostic criteria for gambling disorder. Gambling is one of mankind's oldest activities as evidenced by writings and equipments found in tombs and other places. Blinn et al. (2013) noted that gambling dates back to Paleolithic period; before written history. In Mesopotamia, the earliest six-sided dice betting dates to about 3000 B.C (Corina, 2010). In China, gambling houses and betting on fighting animals were wide spread in the first millennium B.C. Records trace gambling in Japan as far back as the 14th century B.C. (Corney & Davis, 2010). Gambling has been a primary recreational activity in Britain for centuries (Effertz et al., 2018). Poker, the most popular leisure activity in USA dates back to the 17th century (Gamonde, 2019). In the early 20th century, gambling was almost outlawed in USA, however, the late 20th century saw relaxation of laws against gambling.

Potenza (2014) observed that increased availability of gambling opportunities and expansion of legalized gambling has been identified as important public health concern. The inclusion of gambling disorder as behavioural addiction in DSM-5 TR (APA, 2022) instigated the need to understand the psychopathology of the condition and risk factors for its development. Pathological gambling is mainly characterized by high frequency of gambling as well as high amount of money spent (Hodgins et al., 2012). A non-pathological gambler seems to engage in this behaviour for the purpose of amusement (Shenassa, 2012). Problem gamblers enroll in gambling for financial gains (Harris & Griffiths, 2017).

Online gambling has grown from obscurity to become one of the world's most popular pleasures (Kimberley et al., 2010). From simple beginnings, gambling has become one of the most profitable industries in the world. Gambling opportunities are highly facilitated by the growth of the internet and social media platforms (Gainsbury, 2015). The internet also offers a social environment for gamblers and gamers such as discussion forums as well as in game interaction tools. Addictive gambling is mainly fuelled by technology and globalization. Online gambling has become easily accessible to young people (Labrado & Vellojo, 2019). A growing number of university students are performing dismally as a result of gambling (Canale, 2016).

One of the forms of gambling that have gained popularity in Africa is online sport betting (Abdi, 2015). In Kenya, sports betting is the main recreational activity among the youth (Koross, 2017). In the last decade, the market for sport betting has gained prominence (Canale, 2016)). In Kenya, gambling has grown tremendously since 2013 when the first line betting company was registered (Koross, 2016).

Gambling is viewed as acceptable and legal forms of recreation (Mubarak & Blanksby, 2013). Gambling is enjoyable and harmless to some people, but for others it can be addictive with far reaching negative implications (Petry et al., 2014). Problem gambling is closely related to poor academic performance, substance abuse, anxiety and depression (Moore, et al., 2013). The prevalence of addictive gambling has significantly increased among young people globally (Nawak, 2013). Pathological gambling is correlated with personality disorder (Chiu, 2010). Personality traits such as impulsivity and low stress tolerance is linked to gambling behaviour (Nawak, 2013).

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It is estimated that 2.6 million students in universities worldwide can be classified as having problem gambling with adverse consequences (Oksanen et al., 2019). University students seem to be largely prone to developing problem gambling (George et al., 2016). In meta-analysis of the prevalence of gambling addiction among university students globally, the main mean rate of addicted gambling was reported to be 10 % (George et al., 2016). Social demographic correlation with gambling among university students include, male gender, personality, chemical abuse as well as depressive symptoms and low social-economic status (Moore, 2016). Despite the global concern of gambling being a public health issue especially among the youth, gambling has continued to grow exponentially (Gainsbury et al., 2015; Roukka & Salonen, 2020)).

This study is guided by social learning and cognitive behaviour theories. Social learning theory models by Albert Bandura consider gambling as a learned behaviour, acquired through imitation, either of an exemplary figure or from one's peers (Bandura, 1977). Social learning models of gambling suggest that gambling falls along a continuum of problem-free to problem-dominated behaviour (Walker, 1992). Based on social learning theories, gambling behaviour can be reduced because the behaviour is learned, and it can also be unlearned (Bandura, 1977). The major input of social learning theory is it includes the entire population of gamblers, and, therefore, has no artificial contrast between problematic and non-problematic gambling. However, the social learning theory appears to underestimate the power of individual emotions, motivations, as well as perceptions to influence the results, and exaggerates the potential of external social factors (Brown, 1987).

Cognitive-behavioural theory builds on social learning theory which was authored by Albert Bandura, but focuses on the role cognitive processes take in the acquisition and maintenance of gambling behaviour (Ladouceur, Boisvert, & Dumont, 1994). Gambling behaviour is acquired through the traditional mechanisms of operant and classical conditioning (Brown, 1987). Once the gambler experiences the thrill of winning, which acts as a positive reinforcement of the behaviour, it escalates the likelihood that the gambler will return to gamble again. Gamblers learn winning will be intermittent, but it will occur, and so they learn to continue gambling in spite of repeated losses (Walker, 1992). The risk factors for problem gambling are broad and have been reported in numerous studies. The primary risk factors include biological variables such as male gender, impulsivity as well as behavioural factors such as chemical and substance abuse and propensity geared towards violent behaviour (Bishof, et al., 2010). Broader risk factors for gambling disorder include but are not limited to family environment and availability of gambling sites and opportunities (Effertz et al., 2018; Bishof, 2013)). In terms of ecological factors, the role of the neighborhood and peers has been widely documented as a risk factor for problem gambling (Van et al., 2014).

The sports gambling topography in the United States (US) was changed dramatically in mid-2018, and it is hoped that the market widely opens up drastically among the different states (Matheson, 2021). As of early 2021, about 20 states were operating some form of legalized sports wagering; moreover, five were operational by the end of 2019. Since 2018, another 20 states have filed some form of sports wagering legislation in the wake of the US Supreme Court's decision to deregulate sports betting (Rodenberg, 2020). That shows that nearly 92% of states already took part or proposed a registration to participate in sports betting since 2018. With additional states in the fold and increased customers in the market, investors and technology firms are betting on the financial profit of a multi-billion-dollar windfall (Matheson, 2021). The far-reaching implications of sports betting in the US are difficult to know, but if states newly introduced legal structures mirror other major betting markets like the United Kingdom (UK) and Canada, the US market may expand tremendously (Shapiro, Drayer, & Dwyer, 2020).

University students may be endangered to gambling-related challenges (Chan., Zane, Wong, & Song, 2015; Wong, So, & Chu, 2021). In addition, Nowak (2017) noted that rates of problem gambling in students in the USA could be as high as 10.23%, lately, a survey of 2,000 UK university students found that 80% had gambled, with 41% reporting that their gambling had caused by adverse ramifications on their studies (Young Gamers and Gamblers Education Trust, 2021). Likelihood of gambling-related problems among students may also vary between courses of study. Gainsbury et al. (2015) surveyed differences in gambling behaviour between Australian university students studying psychology and students from the general population. They established that a significantly enormous proportion of psychology students were rated low risk gamblers (32%) compared to the general population (25%). Psychology university students were also at lower risk of gambling related problems, compared to students coming from the general

population. (Mond, Skromani, Purton, Cooling, Fan, Harris, Bridgman, Presser, & Rodgers, 2019). In addition, Mond et al. (2019) found that male international university students studying in Australia were 5.5 times more likely to encounter problematic gambling than local students. Such findings pinpoint potential cross-cultural dissimilarity in social norms and value systems, such as the promotion of chances to gamble, and help-seeking behaviour for gambling problems and mental health (Moore et al., 2013).

Epidemiological surveys in North America and Europe have unveiled that majority of the young people report gambling activities with the prevalence rate of 80% (Bishof, 2013). A minority of the population tends to develop serious problems as a result of their gambling behaviour, and hence they are diagnosed with gambling disorder (Sassen et al., 2011). The rates of innate recovery from gambling disorder with psychotherapy is generally high (Bishof, 2013).

One outstanding attribute of problem gambling is co-occurrence with psychiatric disorders. Highest comorbidity rates of gambling disorder include depressive symptoms as well as chemical and substance abuse disorder (Bischof et al., 2013). In addition, impulse control and anxiety disorder have high comorbidity with problem gambling (Villela et al., 2011). Genetic factors have been identified as a predictive variable for problem gambling (Grant et al., 2016). Hereditary predispositions are connected to modulations of dopamine and serotonin systems in the brain (Hodgins, et al., 2012). Individuals with problem gambling may have dysfunctional neurobiological process which is related to addictive behaviours in general (Shenassa, 2012). Furthermore, neuropsychological correlates of gambling disorder are lower inhibitory control and increased risk taking (Slutske et al., 2012).

Social and environmental factors influence gambling behaviour to a larger extent because localities can control the sanction as well as gambling opportunities (Moore et al., 2013). Prevalence of gambling are more common in disadvantaged neighborhoods as compared to high socio-economic and affluent neighbourhoods (Slutske et al., 2012). Furthermore, proximity and physical access to gambling venues links people to gambling activities (Wang et al., 2015).

Grant et al. (2016) argued that greater accessibility to gambling venues leads to high levels of frequent and addictive gambling. Neighborhood environmental factors play a significant role in shaping gambling behaviour in young adults. In their study of environmental accessibility of gambling venues Hing et al. (2016) found that there exists a positive relationship between

heightened accessibility to gambling and development and maintenance of problem and addictive gambling.

The magnitude and the effect of problem gambling among university students in Kenya still remains scanty (Koross, 2016). Studies conducted on gambling in Kenya have been done mainly among the general population. There is insufficient information on prevalence of gambling among university students. The objective of this study is to provide data on problem gambling among selected university students as well as predictive factors of problem gambling. This study therefore sought to bridge the gap by establishing factors contributing to gambling behaviour among university students in Kenya. In addition, this study may encourage policy makers to come up with effective strategies of protecting vulnerable groups from problem gambling.

METHODOLOGY

The researcher applied descriptive quantitative research design in this study. The first objective of this study was to find out whether gender, socio-economic status, peer influence and acute stress are predictive factors for gambling. The other objective was to examine prevalence of problematic gambling among the subjects. The target population was students at Kisii university. Sampling procedure and sample size was informed by Mugenda and Mugenda (2003) who say that for any population less than 100, a census can be conducted and for a population between 100 to 1000 a sample of 30% of the population can be obtained. In addition, for a population of over 1000, a sample of 10% is adequate.

A sample of 152 respondents who represent 30% of 506 students in psychology department were selected through purposive sampling based on their year of study and gender. The sample size was composed of 78 male and 74 female, aged between 18 and 30 years. A quantitative study utilizing a descriptive cross-sectional research design was used to gather data. The actual study was preceded by a pilot study at Kericho campus. The goal of the study was to eliminate any unclear items, while foreseeing and modifying any flaws in the study. In addition, it enabled preliminary data analysis to determine whether the data which would be collected would answer the study question. The dependability of the research equipment was calculated using the information gathered from the pilot study. The Cronbach's alpha approach for internal consistency was used to assess the questionnaire's reliability. According to Mugenda and Mugenda (2009), the results of a single test given to a sample of participants are used to establish

the internal consistency of data. In this study, the results of one questionnaire item were associated with the results of other questionnaire items. The correlation between the items was then calculated using the Cronbach's coefficient Alpha. It was expected that an instrument's internal dependability would be represented by a reliability co-efficient of 0.7 or higher (Fraenkal & Wallen, 2000). The usage of the expert analysis approach was used to verify the instrument's validity. The experts in this case were a number of psychologists in the area of study. The researcher also contacted some experts to validate the questionnaire and the tool which were used to collect the data.

Prior to the study, all participants were oriented to the administration protocol and the nature of the procedure. In addition, verbal explanation of the study was provided. Furthermore, students were informed early that the study participation was voluntary and that they could withdraw their informed consent at any time during and after testing. If subjects had difficulties understanding the procedure, additional explanation was provided. Participants were also informed about the purpose of the study and were assured of confidentiality. Data was collected using a self-administered questionnaire that was used to capture social demographic characteristics of the study population. The respondents were further screened for problem gambling using Canadian problem gambling quiz. A survey questionnaire which measures respondents' involvement in gambling as well as their attitude and opinion of the same was used. The quiz had nine items based on likert scale. The respondents were offered five-point likert skills scale questions from which to select a response. The higher the respondents' score, the higher the risk that one's gambling is a problem.

Score	Risk	Interpretation
8-27	High risk	A person scoring in
	gambler	this range may be
		gambling dependent
		and is experiencing
		a substantial level of

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		gambling related problem
3-7	Moderate risk gambler	A person scoring in this range will
		already be experiencing some
		problem related to their gambling,

1-2	Low risk	Low risk gambler
	gambler	experiences one or
		two problems
		related to gambling
0	Non-problem	Non-problem
	Gambler	gambler experienced
		no problem for the
		last one year.

Descriptive and inferential statistics were used to analyze the data. The data was edited classified, coded, analyzed and interpreted using descriptive statistics by tallying and forming frequencies.

RESULTS

Demographic Information

Figure 1: Gender



The male respondents were slightly higher (51%) than the female respondent who were 49%.





In terms of age, 44.1% of the respondents were aged 18-20 years and 21-22 years respectively, 9.9% were aged 23-25 years, while 2% were aged 26-30 years.





Majority of the respondents (77%) described their socio-economic status as low, 19.1% medium, while 3.9% rated their socio-economic status as high.



Figure 5: Gambling

Respondents who were not involved in problem gambling were (66%), while 34% were involved in problem gambling.

Table 2: Year

	Frequency	Percent (%)
1	38	25
2	40	26.3
3	38	25
4	36	23.7
Total	152	100

There was equal representation in terms of year of study, with the respondents from each year averaging 25%. Year 2 representatives were slightly more at 26.3%.

		Gamblin	g			
		L	М	Н	Total	Chi Square (P value)
Peers' influence	NO	21	10	1	32	
						8.723
	YES	5	12	3	20	(0.013<0.05)
	Total	26	22	4	52	

Table 3: Relationship between Peers' influence and extent of problem gambling

Table 3 shows the cross-tabulation between peers and extent of gambling. The results reveal that peers and extent of gambling are significantly related. This was supported by a chi square of 8.723 and p value of 0.013<0.05. This implied that peers are a significant predictor of gambling.

		Gambli	ng			
		L	М	Н	Total	Chi Square (P value)
stress	NO	19	6	1	26	
	YES	7	16	3	26	11.084 (0.004<0.05)
	Total	26	22	4	52	

Table 4: Relationship between stress and magnitude problem gambling

Table 4 shows the cross-tabulation between stress and extent of gambling. The results reveal that stress and gambling are significantly related. This was supported by a chi square of 11.084 and p value of 0.004<0.05. This implied that stress is a significant predictor of gambling.

			Gambling	
Factors	Categories	NO	YES	Total
	Male	30	48	78
Gender	Female	70	4	74
	Total	100	52	152
	18-20	42	25	67
	21-22	45	22	67
Age	23-25	10	5	15
	26-30	3	0	3
	Total	100	52	152
	1	23	15	38
	2	25	15	40
Year	3	28	10	38
	4	24	12	36
	Total	100	52	152
	L	78	39	117
Socio-economic	М	20	9	29
status	Н	2	4	6
	Total	100	52	152

 Table 5: Cross tabulation between demographic factors and problem gambling

In terms of gender, 48 male respondents (31.57%) had problem gambling, only 4 female respondents (2.63%) had problem gambling. In terms of age, respondents aged 18-20 years (25) engage in problem gambling compared to those aged 21-22 years (22). Respondents in year one (15) and two (15) engaged in problem gambling compared to respondents in other years. Further, the respondents whose socio-economic status was low (78%) were more involved in problem gambling compared to those in medium and high socio-economic status.

DISCUSSION

This section discusses the study results in line with the objectives of the study. The key findings were derived from data analysis and interpretations. In addition, this section presents a discussion of the findings as presented within the objectives. The link between the findings and theoretical underpinnings as well as literature review are also discussed.

The relationship between gender and gambling levels was examined in this study. The results indicated that 31.6% and 2.6% of the male and female respondents respectively had problem gambling. Results of this study showed male students reported higher levels of gambling than their female counterparts. These findings are consistent with previous studies which revealed that male students normally report higher levels of problem gambling than female peers. The argument advanced by Fong et al. (2010) that men are more likely to gamble than women is supported by Gamonde (2019). The study findings showed that male students are at a higher risk of problem gambling as compared to their female students' counterparts. This assertion supports Elliot's (2019) findings that male students are highly likely to gamble as opposed to their female colleagues.

Most studies indicate that the male students are at a higher risk of problem gambling compared to their female counterparts (Chiu, & Storm, 2010; Potenza, 2014); Labrador, & Vallejo-Achón (2019). Studies indicate that the female participation rate in both venue and online gambling are rising (Calado & Griffiths, 2016), however gambling is a male dominated activity, men are therefore more vulnerable to problem gambling. The study showed that 75 % of the respondents who came from low socio-economic status tend to have problem gambling as opposed to 17% and 7% of the respondents who emanate from middle or higher socio-economic status respectively. This finding is consistent with Van der Maas (2016) who argued that individuals with a low socio-economic status are at a greater risk of problem gambling. Furthermore, gambling presents actions these individuals take to significantly improve their financial situation, even when the chances are very low to win (Wu, 2012). Studies conducted in various countries have shown that gambling opportunities are concentrated in the socio-economically disadvantaged areas (Benegal, 2013; Wardle, Keily, Astbury, Reith, 2014). Students coming from families with excessive financial challenges are driven to extreme lengths to cover debts (Potenza, 2014)). The current study indicated that respondents who engage in problem gambling had acute stress levels.

reveal that significant stress levels and problem gambling are significantly related. This was supported by a chi square of 11.084 and p value of 0.004<0.05. Slutske et al. (2012) found that young adults who gamble reported significantly high stress symptoms. Furthermore, more severe gambling has been linked to a higher episodes of stressful life experiences (Fong, et al., 2010). More severe gamblers experience greater number of stressors than social gamblers and social gamblers reported greater number of stressful events than non-gambling youth (Harris & Griffiths, 2017). How one responds to stress may be a significant factor in determining who may gamble without adverse effects versus those who develop a problem gambling disorder, hence some people gamble in order to escape from stress levels.

The results of this study further revealed that respondents are likely to be influenced by their peers to participate in problem gambling. This was supported by a chi square of 8.723 and p Value of 0.013<0.05. This implied that peers are a significant predictor of problem gambling. These findings are in agreement with Coross (2016) who noted that friends influence gambling behaviour in two ways both by initiating the gambling and by normalizing it. Abdi et al. (2013) mentioned peer influence and parental gambling as predisposing factors to both problem and pathological gambling.

CONCLUSION

The purpose of this study was to investigate the predictive factors of gambling and prevalence of problem gambling among the students in Kisii public university in western Kenya. The study results revealed that gender, socio-economic background, peer group influence and acute stress are risk factors for problem gambling. It was also found that a significant number of male students engages in problem gambling as compared to their female counterpart. The result of this study showed that male students are more likely to have problem gambling as compared to female students. The study revealed that respondents who were not involved in problem gambling were (66%), while 34% were involved in problem gambling. There is an urgent need for university counselors to address the escalating problem gambling issue among students. Further research is necessary to find out other risk factors for problem gambling as well as the coping mechanisms of students with problem gambling.

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