

RELATIONSHIP BETWEEN EXTRAVERSION AND GAMBLING TENDENCIES AMONG STUDENTS IN NYAMIRA SOUTH-SUB COUNTY, KENYA

¹NYAMONGO OMARI ANDREW, ²DR OWAA JUDITH, ³DR MWEBI BENARD

^{1,2,3}JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

Abstract: The Purpose of the study was to explore the relationship between extraversion and gambling tendencies among secondary school students in Nyamira South Sub County, Kenya. Objective was to determine the association between extraversion and gambling tendencies among students in Nyamira South Sub-County. It was informed by Eysenck's theory of Personality and a conceptual framework. The study adopted concurrent triangulation research design within the Mixed Method Approach. The Units of analysis were 50 secondary schools. The target populations were 12667 students, 50 Guidance and counselling Teachers (G&C Teachers), 52 Deputy Principals and 50 Parents and Guardians. The sample consisted of 370 students (Krejcie and Morgan 1970), 15 G&C teachers, 15 Deputy Principals and 15 Parents and Guardians. The schools were arranged into homogeneous groups and then picked through simple random sampling while the students were selected through simple random sampling. Data was collected through use of questionnaires and interview schedule. To ensure validity of instruments, the instruments were developed under close guidance of the researchers' Supervisors. To test for reliability, test-retest technique was applied and a correlation coefficient of 0.797 was obtained. Data was analysed using descriptive statistics such as percentages, mean and frequency counts and inferential statistics such as Karl Pearson's and correlation and regression analysis. Qualitative data was analyzed on the basis of themes and sub-themes that emerged from the study. The study found out that there was a statistical significant association between extraversion and gambling tendencies ($\chi^2_0 = 12.558 > \chi^2_\alpha = 3.84$). The study concludes that Students exhibiting strong extroverted personality subtype traits have a higher frequency of gambling tendencies than other personality subtypes. Furthermore, extroverts are more likely to develop into pathological gamblers as compared to others because more are easily addicted. This study may be significant to Students in secondary schools, G&C teachers, Parents and Guardians and Board of Management of schools. A study on effects of gambling in teaching and learning in secondary schools in Kenya would expound the present study.

Keywords: gambling tendencies, secondary school students, instruments, conceptual framework.

1. INTRODUCTION

1.1 Background to the Study:

Gambling is exploding in popularity and for many gamblers; it has progressed from a pass time activity to something much worse. This is spreading throughout all nations of the world infecting virtually every household, young and old, rich and poor, ignorant and educated (The Real Truth, 2013). It is risk motivated by riches. Staking something of value on the outcome of an event that involves chance in hopes of gaining objects of value that have been stalked on the event by others. Gambling started in mid-1600 in casinos in Las Vegas USA and spread to the entire world (Schwartz, 2013). As technology advances, forms of gambling also expand and change. Modern forms of gambling include, Sport Betting, Playing Cards, Lotteries like Lotto and playing in Chinese electronic coin or token slot machines.

A report from USA prepared by Pennsylvania Gaming and Controlling Board (May, 2016) on fantasy sports estimated that the number of fantasy sports participants in the United States and Canada has grown from approximately 500,000 in 1988 to 56,800,000 in 2015. The 2015 figure represents 14% of all adults in the United States. It provided a further demographic breakdown which included 66% male, 34% female; average age: 37; 57% of participants have a college degree or more; 47% of participants have a household income of \$75,000; 66% have full time employment; and the average annual spend per participant is \$465.4. The report does not show the association between personality and gambling.

In Scotland, Reith (2006), found a significant correlation of gambling with household income, with those in the lowest income categories nearly three times as likely to be defined as a problem gambler. Prevalence amongst men was found to be two to three times higher than amongst women. Reith argued that gambling was also inversely correlated with age, decreasing as age increased, although this relationship was clearer for men than for women. Single people were more likely to be problem gamblers than married people, although the study points out, this is likely to be a function of age. Reith also noted that gambling is associated with having parents who gambled and starting gambling at an early age.

In England and Wales, a study done by Gambling Commission (2016), indicated that in overall, 16% of 11-15 year olds spent their own money on a gambling activity in the week prior to taking part in the study. The most popular forms of gambling continue to be fruit machines (5%), placing a private bet with friends (5%), playing cards for money with friends (4%), and National Lottery scratch cards (4%). In total, 8% of 11-15 year olds had gambled on commercial premises in the last week, and 8% had played games for money with friends. Unfortunately the report was silent on factors leading to gambling among the youths and if personality and gender are causative factors.

In Alberta, it was noted that Gambling was a problem for an estimated 5% of Albertans - a group that likely now included some school administrators, teachers, parents and students, although it is a problem of a different kind (Laura, 2010). This was an indication that teachers and students are actively involved in gambling. The study did not discuss how ones behaviour contributed to gambling tendencies and which personality type and gender are more likely to be involved in gambling.

In South Africa, National Gambling Board (2013), commissioned a study where it was established that gambling had become normalised behaviour in South Africa. Of the participants, few raised serious moral concern. The research found out that underage gambling was wide spread shaped by class, culture and geographical location. Nonetheless, the study failed to highlight the association between personality type and gambling tendencies. In Zimbabwe, due to rising poverty and unemployment level at 5.4%, many ordinary citizens especially the young and unemployed are increasingly turning to gambling. The industry has evolved with the advent of various players coming on board (Mukeredzi, 2015).

In Nigeria, football betting was very popular among the youths. Statistics have shown that 70% of Nigerian youths are football betting fanatics. Nobody left out, the old and the young, students, touts and schoolboys are involved in betting (Maverickexcel, 2016). In almost every part of Lagos and in some parts of Nigeria the numbers of gamblers have increased in recent times as Nigerians have turned to gambling especially *Baba Ijabu* and sports betting as the newest form of gambling to make extra money or even make big money (Omonisa, 2015). Gambling has side effects. In the University of Nigeria, Dachen (2016) reported a final year student rendered all the efforts of his parents useless by committing suicide after losing money on a bet.

The discovery of sports betting networks in Kenya has become a nationwide concern. Gambling can be described as betting money or some form of property on the outcome of a game or event that is ultimately based on chance. Betting has become a way of life in Kenya but there is a high rate of gambling amongst university students. In Kenya, gambling sports betting has swept the country like storm in that most people bet on a daily basis. Sports betting has recently gained great popularity and become the most promising of gambling business, especially when it comes to betting on international football with the prestigious English premier league gaining the most attention (Koross, 2016).

Nyamira Sub County has not been left out in this gambling business. While quoting the Commissioner on crackdown of illegal gambling, Nyamanga (2016) highlighted that youths especially *boda boda* operators were being held captive in the gambling dens where they spend most of their time in gaming. Mander (2016) agreed that gambling has become a threat to security in many parts of the County where betting kiosks have been established. The gambling machines are all over posing danger to youths and students who spend time at the casinos where they get money to bet with. As a result, students are missing classes, forgetting to do homework and some being absent from school.

1.2 Statement of the Problem:

Global investigations have shown that gambling is an activity which occupies the time of the gambler in the belief that luck will one day call with a windfall of riches. In Nyamira, as in other trading centres in the country, there has been a proliferation of gambling machines where practically anyone is allowed to participate in gambling (IEAK, 2016). Surveys done in Kenya (Omollo and Odhiambo, 2016) indicate that over five million Kenyans are involved in gambling. More worrying is the fact that 22% of this population is made of secondary school students who view gambling as an income generating activity. With no investigation done in Nyamira concerning this vice, the present study sought to explore the relationship between personality type and gambling tendencies among students in secondary schools in Nyamira South Sub-county, Kenya.

1.3 Purpose of the Study:

The purpose of the study was to explore the relationship between extraversion and gambling tendencies among secondary school students in Nyamira South Sub County, Kenya.

1.4 Objective of the study:

The objectives of the study was to determine the association between extraversion and gambling tendencies among students in Nyamira South Sub-County.

1.5 Hypothesis of the study:

i. H_{a1} There is a statistically significant association between extraversion and gambling tendencies among students in Nyamira South Sub-County, Kenya.

H_{o1} There is no statistically significant association between extraversion and gambling tendencies among students in Nyamira South Sub-County, Kenya.

1.6 Significance of the Study:

The findings of this study may be useful to school administrators, parents and Guardians, teachers, students, Board of Management(BOM) and the ministry of education.

1.7 Scope of the study:

The study was confined to secondary school students of Nyamira and Nyamaiya Divisions of Nyamira South Sub-county, Kenya. It explored the Relationship between Personality Type and Gambling Tendencies among students.

1.8 Limitations of the Study:

First, students were skeptical about the study and reluctant at first to give information on whether they gamble. The researcher assured the respondents that the information they provided was to be treated confidentially and only for the purpose of the study. Secondly, there was a challenge of interviewing deputies because most of the time they were busy in meeting ministry deadlines in national registration of students. The interviews were postponed a number of times due to busy schedules of some affected respondents but the researcher rescheduled them.

1.9 Theoretical Framework:

The study was informed by Eysenck's theory of Personality. The theory holds that individual personality trait is caused directly by one's genetic make-up and is relatively stable over a long period of time. Eysenck created a model of personality dimensions of extraversion and neuroticism (1967). Neuroticism is a trait consisting of anxiety, tension, depression, and low self-esteem, feelings of guilt, excess fear and obsessive behaviour (Eysenck, 1990). On the other hand, extraversion is a personality trait consisting of mainly sociability with elements of impulsivity, like excitement, directed towards external reality, live, active, assertive, sensation seeking, carefree and usually dominant (Eysenck, 1990), all associated with high level of extraversion.

1.10 Assumptions of the Study:

The study was based on the following assumption that there was an association between extroversion and gambling tendencies.

2. LITERATURE REVIEW

Literature review on extraversion and gambling tendencies among Students:

In a study done in German, Müller, Beutel, Egloff, and Wölfling (2014) investigated the predisposing personality factors for Internet Gambling Disorder (IGD) with a sample of 115, Gambling Disorder (GD) (n = 122), a matched IGD group that did not meet IGD diagnostic criteria (n = 74), and a healthy control (n = 93) in an all-male German sample. Among others, IGD and GD groups differed in extraversion; extraversion was the lowest for the IGD group and the highest for the GD group. Another study by Walther, Morgenstern and Hanewinkel (2012) measured extraversion in a population of non-clinical German students (N = 2553) and found that the computer gaming group had lower scores of extraversion than the gambling group. The findings showed that the personality trait of extraversion is a predisposing factor in gambling. The current study was done in Nyamira South Sub-County, Kenya with a sample of secondary school student gamblers of age group 14 – 19 years.

In a similar study done in China by Jiang (2015) on Internet addiction in Chinese adolescents: Personality traits, Internet use, online gaming and risk behaviours, a sample of 467 youths was retrieved from the Chinese Youth Psychological Development Base. In addition to demographic information, the retrieved clinical records contained measurement scales assessing personality (Eysenck Personality Questionnaire), Internet use (Internet Connectedness Index), online gaming, Internet addiction (Internet Addiction Diagnostic Questionnaire), and risk behaviours. The findings from this showed that extroversion is the most significant predictor of risk behaviours. While this was conducted in china, the current study was carried out in Kenya and focused on the relationship between extroversion and gambling tendencies among secondary school students in Nyamira South Sub-County.

According to Eysenck's (1990) extroverted people have an impulsive character. A quantitative observational study was undertaken by Chiu and Storm (2010) to examine the relationship between individual factors and level of gambling involvement, in particular problem gambling (PG). The specific factors under study were personality, perceived luck, and attitudes towards gambling. A sample of university students (N = 185) completed a battery of questionnaires, consisting of the 16 Personality Factor (16PF), Canadian Problem Gambling Index, Belief in Good Luck Scale (BIGL), Gambling Attitudes Scale (GAS), and the Impulsive Non-Conformity subscale (ImpNon) from the Oxford-Liverpool Inventory of Feelings and Experiences. Four groups were formed (Non-PG, Low-Risk, Moderate-Risk, and PG). Personality profiles varied between groups, and there were significant main effects and interaction effects on gender and personality factors. The PG group was higher on impulsivity, and belief in luck, and had more positive attitudes towards gambling. Impulsivity was the strongest predictor towards gambling. The current study did not consider problem gambling, belief in good luck and gambling attitudes but will endeavour to determine relationship between introversion and gambling. This study used 16PF to determine personality trait, the current study will use Eysenck's personality questionnaire to determine personality trait of students involved in gambling in Nyamira South Sub County in Kenya.

In a study by McGhee, Ahvler, Buckhalt and Philips (2012) done in Georgia USA involving 50 grade five students of ages 10 – 12 it was found that pre-adolescents who engaged in the highest risk-taking activities were found to be extroverted (high extraversion). The study was done with a group of pre-adolescent children of a lower age in USA but not in Nyamira South Sub County. The current study targeted students who are between 14 – 19 years old in secondary school whose level of thinking has developed and are able to make a correct decision and establish if the trait of extroversion has an influence on gambling a gap worth bridging.

In a study by Kuss, Rooij, Shorter, Griffiths and Mheen (2013) to investigate the interactions between personality traits and the usage of particular Internet applications as risk factors for Internet addiction, a total of 3105 adolescents in the Netherlands filled out a self-report questionnaire including the Compulsive Internet Use Scale and the Quick Big Five Scale. The findings from this study indicate that extraversion appeared as a protective factor in high frequency online gamers. Extroverts are less likely to be involved in gambling. This study used Quick Big Five Scale and the current study sought to use EPQ to fill the gap in literature.

In South Africa, Bhaga and Ukpere (2012) had an aim of determining the extents to which gambling affects individuals who frequently indulge in gambling, in order to understand their attitudes and experiences. To achieve this objective, a qualitative interview was undertaken. This required face-to-face interaction with the interviewees. Responses were tape

recorded for the purposes of authenticity, credibility, transcription and analysis. The interviews were conducted in an environment most suitable and comfortable for both the researchers and the respondents. Five participants, all of which are frequent gamblers' participated in the study. The participants displayed different personalities but one characteristic that they all had in common was a secured lifestyle, however, they are still oblivious to the dangers inherent in gambling. Some of them are of the view that they are not yet addicted and as such not at risk of becoming compulsive gamblers. The personalities of the gamblers suggest that majority of them are extroverts. On the contrary the current study used quantitative approach where questionnaires were used as tool for data collection and a larger sample comprising student gamblers were used through simple random sampling.

A study done by Otieno (2016) on personality type and risk behaviour in Kenya, among secondary school students in Nyakach Sub-county using a Correlational research design, a multistage random sampling was used to determine sample size of 46 schools (88%) and 390 students (22%). Data was collected using Eysenck's Personality Questionnaire (EPQ) and Risky Sexual Behaviour Questionnaires and analysed using descriptive statistics (frequency, percentages and mean) as well as inferential statistics (Pearson Correlation and multiple regressions). The major findings of the study showed a strong positive correlation of $r = 0.786$ between extroversion and involvement in risky sexual behaviour. This study was on extraversion and involvement in risk sexual behaviour but the current study filled the gap of personality type and gambling tendencies among secondary school students in Nyamira South Sub-County. So far no study has been done in Kenya to investigate the association between extroversion and gambling tendencies among students in Kenya and so the present study was intended to fill that gap and examine if there is an association between extroversion and gambling among the Nyamira South Sub-County student gamblers.

3. RESEARCH METHODOLOGY

3.1 Research Design:

The study used mixed method of research where concurrent triangulation research design within the mixed methods Approach.

3.2 Area of Study:

The study was done in public secondary schools in Nyamira South Sub – County in Nyamira County, Kenya.

3.3 Target Population:

The study targeted 50 public secondary schools in the sub- County with an approximate population of 12,667 students, 50 guidance and counselling teachers, 52 deputy principals and 50 parents. The area was selected because no similar study has been carried out here. Besides these, the sub county has a higher student population who learn in a predisposing environment being an urban centre and its poor performance in national exams.

3.4 Study Sample and Sampling Techniques:

The sample consisted of 370 students (Krejcie and Morgan 1970), 15 G&C teachers, 15 Deputy Principals and 15 Parents and Guardians. The study employed stratified random, simple and purposive sampling techniques.

3.5 Research instruments:

The instruments for data collection for this study were questionnaires and interview schedule.

3.6 Validity of research instruments:

Validity refers to the degree to which an instrument succeeds in measuring or quantifies what is designed to measure (Oppenheim, 2000; Weiner, 2007). In order to improve the validity of the instrument, the researcher sought assistance of research experts, lectures and experienced supervisors from Jaramogi Oginga Odinga University of Science and Technology who reviewed the contents of the instruments and face appropriateness.

3.7 Reliability of research instruments:

Reliability is a measure of the degree to which a research instrument yields consistent trials (Mugenda and Mugenda, 2003). A pilot study is a stage in developing a questionnaire to assist with determination of the effectiveness of the instrument (Hardy and Bryman, 2009). A pilot study was done in five schools outside the sampled schools which were randomly selected. According to Mugenda and Mugenda (2003) at least 10 per cent of the target population is ideal for

piloting. Questionnaires were administered to ten students from each of the schools and this was repeated to the same sample after elapse of one week. Scores which were obtained from the first and second test were analysed, from the two responses a Pearson product moment for test retest was used to compute the correlation coefficient. Scores obtained from the first and second test were analyzed to yield a correlation coefficient of $r = 0.797$ was depicting that the instruments were accepted as reliable.

3.8 Data Collection Procedures:

Data collection refers to the gathering of information to serve or prove some facts (Kombo and Tromp, 2009). Before the study, an approval was sought from the Board of Post Graduate Studies of Jaramogi Oginga Odinga University of Science and Technology (JOUST) from whom an authority letter was obtained. Thereafter, a research permit was sought from the National Commission of Science Technology and Innovation (NACOSTI) to go to the field. The researcher then proceeded to the office of the Nyamira County Commissioner and County Director of Education to seek for permission to carry out the study. A visit was made to the sampled schools and respective respondents of the study.

3.9 Data Analysis:

Data was analyzed both quantitatively and qualitatively.

3.10 Ethical Considerations in research:

Research is governed by rules and regulations which help to reduce conflicts and misunderstanding between researchers and respondents (Kombo and Tromp, 2006). Ethics involves protecting and respecting the respondents taking part in the study (Payne and Payne, 2004). Being Transparent, honest, upholding privacy was fundamental in this study. To ensure this is affected, respondents’ willingness to participate in the study was sought before participation in the study. Ethical principles of doing research such as voluntary participation, informed consent, confidentiality of information, anonymity was sought from the respondents of the study.

4. RESULTS AND DISCUSSION

4.1. Results and Discussion on Association between Extraversion and Gambling:

The hypothesis responded to was:

H_a There is statistically significant association between extraversion and gambling tendencies among students

H_o There is no statistically significant association between extraversion and gambling tendencies among students

A questionnaire was administered to students containing questions on extraversion. The extroverts were subjected to a gambling questionnaire and classified on whether they gamble or not. Table 4.1 shows the responses.

Table 4.1: Frequencies of Extrovert Gamblers and Non-gamblers

			Gambling		Total
			Do not gamble	Gambles	
Extroversion	Count		51	149	200
	% within extroversion		25.5%	74.5%	100.0%
	% within gambles		42.9%	62.6%	56.0%
	% of Total		14.3%	41.7%	56.0%

Table 4.1 indicates that a total of 200 students scored high on extroversion personality questionnaire representing 56.0% of the total student sample. Of which, 149 representing 74.5% reported to have gambled while 51 representing 25.5% had not gambled. This percentage, 74.5, shows that extroverts highly engage in gambling. In addition to this, extrovert gamblers represented 62.6% of the total students who have gambled and further 41.7% of the entire student sample. This is in agreement with a study which was done in South Africa which found out that the personalities of the gamblers suggests that majority of them are extroverts (Bhaga and Ukpere, 2012). Parent 8 contended that:

These students are usually happy and talkative. They are common in a large group and control the whole group. They are the ones who tell others which teams are playing and which team is likely to win based on the odds and past team performance. Because of this, they have made many friends at school and home. They only become sad when they have lost money in a bet.

P8’s sentiments best describes an extrovert according to Cherry (2018) being talkative, usually in crowds, is domineering with many friends. The same opinion was echoed by Jiang (2015) that is the most significant predictor of gambling. Dp7 shared a similar opinion:

These are students who are everywhere, always moving from one class to another greeting their many friends and can’t miss in mistakes. They infrequently come to school. We suspect that they might be even abusing drugs because they are loudest in class.

Dp7 is of the view that student gamblers are very active and have very many friends in all classes. Are constant absentees and make a lot of noise and all this point to the extrovert personality.

P7 shared his views on the personality of students who gamble; “...they are students with many friends... very jovial and talk a lot. You will always find them in mistakes in class because they are very active.”

The views of P7 point out that those who gamble are extroverted. From the description they have many friends, are jovial and talk a lot.

A Chi Square test of association was used to find out if there is an association between extroversion and gambling having satisfied the two required assumptions; the two variables measured at an ordinal or nominal level and the two variables being categorically independent (SPSS Tutorials, 2018; Laerd Statistics, 2013). The test was carried out at 0.05 significance level and the results in table 4.2 were obtained.

Table 4.2: Chi-Square for extroversion and gambling

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.558 ^a	1	.000		
Continuity Correction ^b	11.769	1	.001		
Likelihood Ratio	12.536	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	12.522	1	.000		
N of Valid Cases	357				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 52.33.					
b. Computed only for a 2x2 table					

The Chi Square value from the table is 12.558 with the *P*- value <0.05. The table is 2 x 2 cell which has a degree of freedom of 1 [(c-1) x (r – 1)]. Set at significance level of 0.05 and *df* of 1, the table value (Critical value) is 3.84. When Chi Square Value (12.558) is greater or equal to Critical value (3.84), *H*₀ is rejected. The findings are significant. There is an association between extroversion personality subtype and gambling.

The findings are supported by a research by Chiu and Storm (2010) who examined the relationship between individual factors and gambling involvement. In Chiu and Storm study, it was established that impulsivity was the strongest predictor towards gambling. Similarly, Muller, Beutel, Egloff and wolfling (2014), in their research in German, found out that the personality trait of extroversion is a predisposing factor in gambling.

However, the current study finding disagrees with the findings from a research by Kuss, Rooij, Shorter, Griffiths and Mheen (2013) in Netherlands involving adolescents. The findings from their study indicated that extraversion appeared as a protective factor in high frequency online gamers. Extroverts are less likely to be involved in gambling.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings on the Association between Extroversion and Gambling:

A Chi-Square test of independence revealed that there was statistically significant association between extroversion and gambling among secondary school students in Nyamira South Sub-County with Chi-Square value of 12.558 and *p*- value < 0.005. In general the average student Likert scale score on extroversion was 3.2 where 200 students (56.0%) scored highly on extroversion. The G & C teachers agreed (3.6, 72.0%) that extroverts are likely to gamble than other personality subtypes.

5.2 Conclusion of the Study on the Association between Extroversion and Gambling:

Given that there was an association between extroversion and gambling among secondary school students ($\chi^2_0 = 12.558, p = <0.05 >$ the $\chi^2_{\alpha} = 3.84$), the study concludes that Students exhibiting strong extroversive personality subtype traits are most likely to be swayed into engaging in gambling. Students with extroversive personality have a higher frequency of gambling than other personality subtypes.

5.3 Recommendations of the Study on the Association between Extroversion and Gambling:

In light of the findings that there was an association between extroversion and gambling, this study recommends:

Categorizing students into their most dominant personality subtypes and gender will enable school administrators to monitor students' behaviors and probably make it easy to identify those who engage in gambling.

The government should employ qualified counselors and set up a rehabilitation centre to offer medical help to pathological student gamblers having recorded that some students gambling because they have been addicted.

5.4 Suggestions for Further Study:

The following areas have been suggested for further studies:

- i. A study on effects of gambling in teaching and learning in secondary schools in Kenya.
- ii. A study on physical and psychological effects of gambling to teenagers in secondary schools in Kenya.
- iii. A study on Compulsive gambling symptoms causes and effects among teachers in secondary school in Kenya.

REFERENCES

- [1] Atambo, N., Mwebi, B. and Onderi, H. (2016). Factors Influencing Boy Child Retention in Public Day Secondary Education in Nyamira Sub-County, Kenya. *International Journal of Novel Research in Interdisciplinary studies: Vol.3 Issue 6,pp: (69 – 85), Month: November-December 2016.*
- [2] Bell, R. & Boldero, J. (2011). *Factors Affecting Youth Gambling. Office of Gaming and Racing.* Victoria Government, Australia. Retrieved from www.justice.vic.gov.au
- [3] Best, W.J and Kahn, V. J. (2009). *Research in Education.* New Delhi: Pearl offset press private limited.
- [4] Bhaga, K. & Ukpere, W. (2012). Gambling as a Perceived Societal Problem: A preliminary analysis of attitudes and experiences of frequent/compulsive gamblers. *African Journal of Business Management. Vol.6 (41) pp. 10596 – 10604, 17 Oct 2012.*
- [5] British Columbia Problem Gambling Prevalence Study Final Report (2014). Retrieved from <http://www2.gov.bc.ca/assets/gov/sports-recreation-arts-and-culture/gambling/gambling-in-bc/reports/rpt-rg-prevalence-study-2014.pdf>
- [6] Brunborg, G., Hanss, D., Mentzoni, R., Molde, H. & Pallesen, S. (2016). Problem gambling and the five-factor model of personality: a large population-based study. *Addiction Journal. Vol. 111 Issue 8. August 2016 PP. 1428 – 1435.*
- [7] Carver, A. B. and McCarty, J. A. (2013). Personality and Psychographics of Three Types of Gamblers in the USA. *Journal of International Gambling Studies. Volume 13. Issue 3. Pp. 338 – 355.*
- [8] Chacha, D. (2018). Nyamira Parents Condemn Gambling. Hivisasa. Retrieved from <https://hivisasa.com/posts/nyamira-parents-condemn-gambling>
- [9] Cherry, K. (2018). *5 Personality Traits of Extroverts.* Retrieved from www.verywellmind.com/signs-you-are-an-extrovert-2795426
- [10] Chiu, J. & Storm, L. (2010). Personality Perceived Luck and Gambling Attitudes as Predictors of Gambling Involvement. *Journal Gambling Studies (2010) 26 (2): 205-27. doi:10.1007/s10899-009-9160-x*

International Journal of Novel Research in Education and Learning

 Vol. 5, Issue 3, pp: (73-83), Month: May - June 2018, Available at: www.noveltyjournals.com

- [11] Combat, V. (2014). Women Aspiring to Administrative Positions in Kenya Municipal Primary Schools. *International Journal of educational Administration and Policy Studies*. Vol6(7) pp 119 -130 Sep 2014. Doi: 10.5897?IJEAPS 2012.047.
- [12] Costa Jr., P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional Manual*. Odessa, Psychological Assessment Resources.
- [13] Creswell, J. (2014). *Educational Research: Planning conducting and Evaluating Quantitative and Qualitative Research (4th Ed)*. Upper Saddle River; New Jersey: Pearson Education.
- [14] Dachen, I. (2016) *UNN Student Commits Suicide After Losing Bet*. The Pulse Newsletter. Retrieved from pulse.ng/gist/depression-unn-student-commits-suicide-after-losing-bet-id5827845.html
- [15] Desai, R. A., Sarin, K. S., Cavallo, D. and Potenza N. M. (2010). Video-Gaming among High School Students: Health Correlates, Gender Differences, and Problematic Gaming. *Paediatrics Volume 126. No 6. December 2010*.
- [16] Donati, A. M., Chiesi, F., and Primi, C. (2013). A model to explain at-risk/problem gambling among male and female adolescents: Gender similarities and differences. *Journal of Adolescents*. 36 (2013). 129 – 137.
- [17] Dong, G., Wang, J., Yang, X. and Zhou, H. (2013). Risk personality traits of Internet addiction: A longitudinal study of Internet-addicted Chinese university students. *Journal of Asia – Pacific Psychiatry*. Volume 5. Issue 4. December 2013. Pages 316 – 321.
- [18] Gambling commission, (2016). *Young People and Gambling 2016*. Retrieved from www.gamblingcommission.gov.uk/.
- [19] Garlitus, K. (2012). *Tanzanian Gambling*. Retrieved from Calvinayre.com/2012/06/14/business/tanzanias-growing-industry-becoming-a-boon-for-country/
- [20] Goguyo, O. (7/Dec/2016). *Your child may be gambling more than doing homework*. The Standard newspaper as retrieved from <https://www.standardmedia.co.ke/mobile/article/2000226055/your-child-may-be-gambling-more-than-doing-homework>
- [21] Hing, N., Russell, A., Tolchard, B. and Nower, L. (2014). *A Comparative Study of Men and Women Gamblers in Victoria*. Victoria Australia: Victoria Responsible Gambling Foundation.
- [22] Kerlinger, F. (2003). *Foundations of Behavioral Research (2nd edn)*. New York: Holt Rinehart & Winston Incorp
- [23] Kikwei, S. (2016). *List of sport betting sites in Kenya* as retrieved from www.biasharainsight.com/2016.06/list-of-sport-betting.sites-kenya/
- [24] Kombo, K. D. and Tromp, A. L. D. (2009). *Proposal and Thesis writing. An Introduction*. Pauline Publications Africa: Nairobi.
- [25] Koross, R. (2016). University Students Gambling: Examining the Effects of Betting on Kenyan University Students' Behavior. *International Journal of Liberal Arts and Social Sciences*. Vol 4, No 8
- [26] Kothari, C. R. (2004). *Quantitative techniques (2nd Ed)*. New Delhi: Vikas Publishing House.
- [27] Kuss, J. D., Rooij, J. A., Shorter W. G., Griffiths M. and Mheen, D. (2013). Internet addictions in Adolescents: Prevalence and Risk Factors. *Computer in Human Behaviour*. Volume 29. Issue 5. September 2013. Pp. 1987 – 1996.
- [28] Laerd Statistics, (2013). Chi-Square Test of Association Using SPSS Statistics. Retrieved from <https://statistics.laerd.com/spss-tutorials/chi-square-test-for-association-using-spss-statistics.php>
- [29] Laura, H. (2010). *Do teachers have a gambling problem*. Retrieved from <https://www.teachers.ab.ca/Publications/ATA%20News/Volume-45-2010-11/Number5/Pages/Do-teachers-have-a-gambling-problem.aspx> 7/01/2017
- [30] Mitchell, M. E., Lebow, J. R., Uribe, R. Grathouse, H. and Shoger, W. (2011). Internet use, Happiness, Social support and Introversion: A more fine grained analysis of person variables and internet activity. *Journal of Computer and Human Behaviour*. Volume 27. Issue 5. September 2011. Pp. 1857 – 1861.

International Journal of Novel Research in Education and Learning

 Vol. 5, Issue 3, pp: (73-83), Month: May - June 2018, Available at: www.noveltyjournals.com

- [31] Mugenda, O. M. and Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press
- [32] Mukeredzi, T. (2015) *Young Zimbabweans Warming Up to gambling*. Retrieved from www.un.org/africarenewal/web-features/young-zimbabweans-warming-up-to-gambling.
- [33] Müller, K. W., Beutel, M. E., Egloff, B., & Wölfling, K. (2014). Investigating risk factors for Internet gaming disorder: a comparison of patients with addictive gaming, pathological gamblers and healthy controls regarding the big five personality traits. *European Addiction Journal*. 20: 129-136. <http://dx.doi.org/10.1159/000355832>.
- [34] Musomapsya, J. (2016 / 09 /05). *The Bitter Sweet Side of Sport Betting*. The Citizen. Retrieved From www.thecitizen.co.tz/news/the-better-sweet-side-of-sport-betting-/1840340-3369988-eu-3c3v2/index.html
- [35] Mwaura, M. (2017/Feb/08). *Stop Betting and Work, Muranga MP Tell youths*. Daily Nation. Retrieved from www.nation.co.ke/counties/muranga/betting-youth-lazy/1183310-3804428-thwc40/
- [36] Naude, R., Kruger, S., De Beer, L.T., Saayman, M. & Jonker, J. (2016). The relationship between personality types and leisure time activities amongst Casino employees workplace expectations. *SA Journal of Human Resource Management*. Vol. 14 (1)
- [37] Nordqvist, C. (2017). What's to Know About Gambling Addiction. Medical News Today. Retrieved from <https://medicalnewstoday.com/artical/15929.php>
- [38] Nuttal, P., Shenkar, A. and Beverland, M. B. (2011). Mapping the Unarticulated Potential of Qualitative Research: *Journal of Advertising Research*, 51153-163. Retrieved from EBSCO host
- [39] Nyamanga, D. (2016). *We'll Shut All Chinese Gambling Machines*. Retrieved from scholarmedia.co.ke/index.php/2016/10/31/we'll-shut-chinese-gambling-machine-nyamira-county-commissioner/
- [40] Omollo, K. and Odhiambo, H. (29/10/2016). *Parents' nightmare as gambling and betting crazegrips estates*. The standard newspaper as retrieved from <https://www.standardmedia.co.ke/mobile/article/2000221452/parents-nightmare-as-gambling-and-betting-craze-grips-estates>
- [41] Omonise, O. (2015, June 27). *Desperate times as Nigerians turn to gambling*. Vanguard. Retrieved from www.vanguardngr.com/2015/06/desperete-times-as-nigerians-turn-to-gambling/Ontario_Problem_Gambling_Research_Centre_Guelph_Ontario_February_20_2015.
- [42] Orotho, A. J. (2005). *Essentials of Education and Social Sciences Research Methods*: Nairobi, Masola Publishers.
- [43] Orodho, A. J. and Kombo, D. K. (2002). *Research Methods*. Nairobi: Kenyatta University, Institute of Open Learning.
- [44] Oso, W. Y. and Onen, D. (2009). *A general guide to writing research proposal and report. A handbook of beginning researchers*. Nairobi: Jomo Kenyatta Foundation.
- [45] Otieno, A. O. (2016). Personality as a Predictor of Involvement in Risky Sexual Behaviour. *Advances in Social Psychology*. Vol. 1 Issue 1. November 2016. PP 7- 16.
- [46] Reniers, R., Murphy, L., Lin, A., Bartolomé, S. P., Wood, S. J. (2016). Risk Perception and Risk-Taking Behaviour during Adolescence: The Influence of Personality and Gender. *PLoS NE 11(4): e0153842*. doi:10.1371/journal.pone.0153842
- [47] Resnik, D. P. (2005). *What is ethics in research and why is it important?* National Institute of Health Website. 4th February 2011.
- [48] Ronzitti, S., Lutri, V., Smith, N., Clerici, M. and Jones, B. H. (2016). Gender Differences in Treatment-Seeking British Pathological Gamblers. *Journal of Behavioral Addictions 5(2), pp. 231 – 238 (2016) DOI: 10.1556/2006.5.2016.032*
- [49] Saini, V. K., Baniya, G. C., Verma, K. K., Soni, A. and Kesharwani, S. (2016). A study on relationship of internet addictive behavior with personality traits among medical students. *J Mental Health Hum Behav 2016;21:1 08-11*

International Journal of Novel Research in Education and Learning

 Vol. 5, Issue 3, pp: (73-83), Month: May - June 2018, Available at: www.noveltyjournals.com

- [50] Sarkis, A. S. (2014). Do Extroverts Really Take More Risks? Retrieved from www.psychologytoday.com/US/blog/here-there-and-everywhere/201406/do-extroverts-really-take-more-risks-0
- [51] Schwartz, D. G. (2013). Roll the Bones: The History of Gambling. *Roll the Bones: The History of Gambling, Casino Edition* 1-592.
- [52] Serekan, U. (2006). *Research Method for Business. A Skill Building Approach*. (4thedn). John Wiley and Son Ltd. UK
- [53] Simmons, J.L., Whelan, J.P., Meyers, A.W. et al. *J Gambl Stud* (2016) 32: 205. doi:10.1007/s10899-015-9521-6
- [54] Soane, E., Dewberry, C., and Narendran, S. (2010). The Role of Perceived Costs and Perceived Benefits in the Relationship between Personality and Risk-related Choices. *Journal of risk research* 13(3) pp 303-318 ISSN 1366 – 9877.
- [55] Splevins, K., Mireskandari, S., Clayton, K. et al. *J Gambl Stud* (2010) 26: 189. doi:10.1007/s10899-009-9169-1
- [56] SPSS Tutorials, (2018). *Chi-Square Test of Independence*. Kent State University. Retrieved from <https://libguides.library.kent.edu/spss/chisquare>
- [57] The Real Truth, (2013). *Gambling Plague Part 1*. The Real Truth Magazine. Retrieved from <https://realtruth.org/articles/326-tlog.html>
- [58] Taormina, J. (2009). Social and personality correlates of gambling attitudes and behavior among Chinese residents of Macau. *Journal of Social and Personal Relationships*. journals.sagepub.com/doi/pdf/10.1177/0265407509347935
- [59] Uz, C. & Cagiltay, K. (2015). *Social Interactions and Games*. In: Digital Education Review, 27, 1-12 [Accessed: 05/02/2017] <http://greav.ub.edu/der>
- [60] Wang, C. W., Ho, R. T., Chan, C. L. and Tse, S.(2014). *Exploring personality characteristics of Chinese adolescents with internet-related addictive behaviors: trait differences for gaming addiction and social networking addiction*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25462651>
- [61] Wangari, N. (2017). *Gambling Among Youth In Sub-Saharan Africa*. GeoPoll. Retrieved from <https://blog.geopoll.com/mobile-gambling-among-youth-in-sub-saharan-africa>
- [62] Wanjohi, M. (2012). *Influence of unemployment on the youth*. (Unpublished Master Thesis) Nairobi: Kenya.
- [63] Wardle, H., and Seabury, C. (2012). Gambling Behaviour. *Health Survey of England Vol. 1 Chapter 7*. Retrieved from content.digital.nhs.uk/catalogue/pub13218
- [64] Wardle, H., Moody, A., Spence, S., Orford, J., Volberg, R., Jotangia, D., Griffiths, M., Hussey, D., & Dobbie, F. (2010). *British gambling prevalence survey 2010*. London: The Stationery Office
- [65] Warner, C. (2016). 5 Signs You're Neurotic According to the Big Five Personality Traits- And Why That's Not Necessarily A Bad Thing. Retrieved from [https://www.bustle.com/articles/168760-5-signs-you're-neurotic-according-to-the-big-five-personality-traits-and-why-that-s-not](https://www.bustle.com/articles/168760-5-signs-you-re-neurotic-according-to-the-big-five-personality-traits-and-why-that-s-not)
- [66] WHO, (2009). *Sample size and Sampling Methods*. Paper presented at the training Course in Reproductive Health Research.