

**Participation and attitudes towards gambling in Ghanaian youth: an exploratory analysis  
of risk and protective factors**

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## **Abstract**

**Purpose:** There is little information on youth gambling in Ghana even though there is an unprecedented emergence of various types of gambling and gambling venues throughout the country. The aim of this cross-sectional exploratory study was to examine the role of perceived social difficulties and perceived protective social factors in participation and attitudes of Ghanaian youth towards gambling using data from a school-based survey (N = 770). **Methods:** Participants completed measures on perceived social difficulties, perceived protective social factors, attitudes towards gambling and participation in four types of gambling. Sports betting was the most common form of gambling.

**Results:** There were significant differences in gambling participation with males gambling more than females. Youth who reported more perceived social difficulties from family and friends had a more positive attitude and a negative attitude towards gambling respectively. Youth who reported higher protective social factors from family and teachers were less likely to have a negative attitude towards gambling. In all situations, high frequency gambling resulted in a more positive attitude towards gambling.

**Conclusion:** Perceived social difficulties influences Ghanaian youths to have a positive attitude towards gambling, however, protective social factors from family and teachers may help youth to have a negative attitude towards gambling, gamble less, and consequently achieve academic success.

**Keywords:** Gambling participation; problem gambling; youth; perceived social difficulties; perceived social protection, Ghana

## **Introduction**

The gambling industry is becoming more globalised with multi-national companies running casinos and online betting with new markets emerging, particularly in developing countries (1,2). There are 45 African countries with legalised gambling and most sub-Saharan countries have some form of gambling including casinos, lotteries, traditional horse racing and sports betting. However, despite the growing market, Africa remains low in terms of total revenue, estimated at US\$4.7 billion or 1% globally (3). There are seven casinos in Ghana – five in the capital Accra, one in Tema and one in Kumasi, as well as lotteries, online sports betting, and traditional horse racing. In addition to legal gambling, Ghana has a growing illegal gambling market. For example, 101 illegal lotto operators were arrested by the Ghana police service in April 2014 for lottery fraud, contravening the National Lotto Act which mandates that only the National Lottery Authority is permitted to operate a lottery in Ghana. Currently, Ghana's gambling represents 0.125% of gross domestic product (2).

The revenue from gambling is considered important for local government growth especially in social development (4,5). However, there is a general secrecy about gambling winnings especially when gained illegally (6,7). Many young people who participate in gambling are more likely to live with parents. In a small exploratory study based in the casino city of Kumasi, it was found that gamblers were predominantly male, younger, single and gambled on sports (8). Within the socio-cultural setting of Ghana, young people are required to stay with their parents until they get married before they can move out so parental influence/control in terms of gambling is critical.

High gambling frequency is likely to lead to problem gambling. Problem gambling has been defined differently by various scholars. However, all these definitions reflect a common understanding of problem gambling as the situation when a gambling activity gives rise to harm to the individual player, and/or to his or her family, and may extend into the community (9). In the present study high frequency gambling has been used as proxy for problem gambling whereby youth who engaged in high frequency of play (gambling often or very often) were more likely to have a positive attitude towards gambling, lower school attainment, lower perceived protective social factors and more perceived social difficulties. While many western countries have comprehensive data on the impact of gambling on the population, little is known about gambling in African countries, especially among young people. One of the few studies that has reported gambling impact data in Africa, done in South Africa, reported 2% prevalence of problem gambling and a further 10% being considered at risk (10). Street youth are turning to gambling as a means of earning money in several African countries including Ghana where university students were introducing gambling to the local adolescents, creating problems for the community (11,12).

A recent survey reported over 50% of adolescents in a range of sub-Saharan countries gamble. In this survey Ghanaian adolescents were the lowest participants at 42% with Kenyan adolescents highest at 76% (13). In other parts of the world it has been reported that there is a higher prevalence of problem gambling in adolescents compared to the adult population (14,15). Gambling by adolescents can lead to social, family and personal problems (16,17) and gambling among in-school adolescents is negatively associated with school grades and academic performance (17,18,19).

High frequency gambling could be considered a response to bio-psycho-social needs and may be a means by which a person tries to abrogate negative experiences. Although there are competing theoretical perspectives explaining the development and progression of high frequency gambling, the stress-buffering and main-effect hypotheses have been suggested to explain response to young people's bio-psycho-social needs. The stress-buffering hypothesis suggests that social support (perceived availability of family, friends and teachers and information leading one to believe that he/she is cared for, loved, esteemed) would have a positive impact on health and wellbeing during stressful circumstances (potential risk factors) to the extent that more social support is likely to result in less stress (20) which could subsequently protect adolescents from high frequency gambling. In other words, knowing that supportive others are available could protect or alter and inhibit stress response (21). Stress buffering could account for the relationship between lack of social support and gambling (22). Additionally, gambling has been implicated in buffering stress as a form of distraction from overt stressful experiences in the absence of social support (23).

The main effect hypothesis of social support, on the other hand, suggests that social support could have a positive impact on health and wellbeing irrespective of stress (21), as social controls, as a protective factor, could compel individuals to abide by normative health behaviours (24,25) and thus, participate less in gambling. Social support could be a protective factor that influences various health behaviours such as engaging in physical activity, good eating behaviours (26,27) and unproblematic gambling (17,28).

This current study has two main aims; first, to provide descriptive data on the prevalence and demographic distribution of gambling behaviour among Ghanaian youth and, second, to examine

the role of perceived social difficulties and perceived protective social factors in participation and attitudes towards gambling among Ghanaian youth.

## **Method**

### **Sample**

A cross-sectional survey design was used to select a sample of second-year (Form 2) and third-year (Form 3) students in four senior high schools in Accra, Ghana. These four schools were selected randomly from the register of all 21 senior high schools in the Accra Metropolitan Assembly based on strata - single sex and mixed sex schools. As a metropolis and the most populated city in Ghana, Accra is made up of young people from different tribal, cultural, and socio-economic backgrounds across Ghana, so it is expected that the sample will be representative of young people in senior high schools in urban areas across Ghana. Furthermore, senior high schools in the Greater Accra region typify the general characteristics of senior high schools across Ghana, with both mixed and single-sex schools as well as prestigious, average and less prestigious schools. Single-sex schools are generally regarded as prestigious apparently because students are provided with high quality education, demonstrated by high pass rate many students successfully gaining admission to study in good tertiary institutions.

### **Procedure**

Three classes in each of the four schools were randomly selected and on the day of data collection students who were in these classrooms and willing to participate were invited to complete questionnaires. Ninety-seven percent of the students in all the schools responded to the

survey. A total of 770 questionnaires were returned and this sample had an average age of 16.9 years made up of 266 females and 504 males. First-year students could not participate as they had not yet reported to school at the time of data collection. A study description and consent form was provided to individual students within the schools that agreed to participate. School authorities after discuss issues about privacy, confidentiality, anonymity and harm to participants gave permission for students to participate. All participants below 18 years received parental permission before participating in the study. After school authorities had given permission, research ethics approval was obtained formally from the University of Essex, UK.

## Measures

### *Attitudes Towards Gambling*

The Attitudes Towards Gambling Scale (ATG) is a nine-item measure of a person's economic perception of gambling (29). The items include: 'Gambling is a risky activity', 'You can lose all your money gambling', 'Gambling is a waste of money', 'Gamblers usually lose in the long-run', and 'To gamble is to throw away money'. Respondents rate their agreement on a 5-point from 'strongly agree' to 'strongly disagree'. The last four items are reversed so that higher scores represented a less positive attitude towards gambling. All items are added to give a total score where lower total scores indicates a more positive attitude to gambling. The scale had an acceptable Cronbach's  $\alpha = 0.78$  with this sample.

### *Perceived social difficulties*

The Adolescent Stress Questionnaire (ASQ) (30) is a 58-item measure, but a 19-item version was used to assess perceived social difficulties. The questionnaire items were split between

family (e.g. arguments at home, disagreements between your parents, lack of understanding by your parents), friends (e.g. pressure to fit in with peers, being hassled for not fitting in, peers disturbing you about the way you look, being judged by your friends) and teachers (lack of respect from teachers, not being listened to by teachers, getting along with your teachers) factors. The ASQ is scored on a 5-point Likert type scale with response categories ranging from 1 - never to 5 - very often, with higher scores indicating more perceived social difficulties.

### *Protective social factors*

The *Perceived Social Support from Family* (PSS-FA) and the *Perceived Social Support from Friends* (PSS-FR) scales (31) as well as support from teacher's subscale of the *School Success Profile* (SSP) (32) were used to assess potential protective social factors in relation to family, friends and teachers respectively. Responses to the PSS-FA, PSS-FR and SSP were on a 5-point Likert scale ranging from 1 - strongly disagree to 5 - strongly agree where higher scores indicate more protective social factors. The PSS-FA and PSS-FR scales have items assessing whether participants' family and friends give them the moral support they need, enjoy hearing about what they think, sensitive to their personal needs and give them emotional support. The social support from teacher's subscale of the SSP has items asking young people if their teachers show them respect, encourage and listen to them.

### *Gambling participation*

Participants were asked to report on the frequency they participated in four types of gambling: card games, sports betting, lotteries and poker machines on a five-point Likert scale: never (1),

not often (2), sometimes (3), often (4) and very often (5). Response options for each type of gambling was categorised as low frequency and high frequency gambling based on median split. Low versus high frequency gambling were dichotomised as (1 vs 2-5), (1-2 vs 3-5), (1 vs 2-5) and (1 vs 2-5) for card games, sports betting, lotteries and poker machines respectively

### *Socio-demographic factors*

Participants were requested to indicate their age - later categorised as younger (14-17 years) and older (18-21 years) based on median split, gender, Form/class/grade, gender composition of school and residential status.

### *Educational attainment*

This was assessed with students' examination Grades in four core subjects in their most current terminal examinations. Grades A, B, C, D, E and F were scored 6, 5, 4, 3, 2 and 1 respectively for the purpose of statistical analysis. These were then added up to give a composite score so that higher marks indicate higher educational attainment.

### *Data Analysis*

Initially, assumptions of linearity, homoscedasticity, normality and multi-collinearity in the data were assessed. None of these assumptions were violated. Demographic differences in frequency of types of gambling and attitudes towards gambling were analysed using independent samples t-tests. Multiple regression analyses with the ATG scores as the dependent variable were run to identify associations with school attainment and school characteristics as well as perceived social difficulties and perceived protective social factors. Data analyses were performed using IBM SPSS version 22.

## Results

### *Demographic characteristics*

From Table 1 it can be seen that there were demographic differences in all types of gambling with male students having higher participation on all forms of gambling than female students. Male students had significantly more favourable attitude towards gambling with lower ATG scores. Older students were significantly more likely to participate in all four types of gambling compared to younger students. Also, there were significant differences in sports betting between Form 2 and Form 3 students with Form 2 students participating more than Form 3 students. No Form (year in school) differences were found with cards, lotteries or poker machines. There was a significant difference in card games participation between single sex and mixed sex schools with single sex schools reporting a higher frequency. Finally, Day students had significantly more favourable attitude towards gambling with lower ATG scores than boarding students.

<Insert Table 1 about here>

### *Gambling behaviour*

Overall, the highest participating form of gambling was sports betting with 21.1% of the sample stating they had gambled on this activity often/very often compared to card games (4.5%), lotteries (1.7%) and poker machines (2.9%). When the ATG scale was compared against gambling type, results show significant effects for all types of gambling. Youth who engaged in high frequency card play had a significantly more positive attitude towards gambling than those who engaged in low frequency of play. For sports betting, high frequency bettors had a significantly more positive attitude to gambling than low frequency bettors. Also, youth who

played lotteries and poker machines more frequently had a significantly more positive attitude towards gambling than those who engaged in these types of gaming less frequently. In all cases high frequency gamblers considered gambling to be a positive experience compared with non- or low frequency gamblers (Table 2).

<Insert table 2 about here>

Furthermore, a measurement of school attainment using Grade scores in the four attainment areas produced a single measure from one (low attainment) to six (high attainment). A multiple regression was run to predict gambling attitudes with school attainment and school characteristics. The multiple regression model statistically significantly predicted gambling attitudes,  $F(4, 736) = 7.48, p < .001, \text{adj. } R^2 = .34$ . Residential status and gender composition of the school added statistically significantly to the prediction,  $p < .05$  (Table 3).

<Insert Table 3 about here>

Table 4 provides the mean ATG scores against each attainment level. Here we can see that with lower educational attainment students were more positive towards gambling.

<Insert Table 4 about here>

#### *Perceived social difficulties and ATG*

A multiple regression analysis was run to predict ATG from perceived social difficulties (from family, friends and school). The multiple regression model statistically significantly predicted ATG,  $F(3, 673) = 2.66, p = .005, \text{adj. } R^2 = .007$ . Perceived social difficulties emanating from family and friends added statistically significantly to the prediction,  $p < .05$ . Perceived social

difficulties from family resulted in a positive ATG and perceived social difficulties from friends resulted in a negative ATG (Table 5).

#### *Perceived protective social factors and ATG*

A multiple regression was run to predict ATG from perceived protective social factors (from family, friends and teachers). The multiple regression model statistically significantly predicted ATG,  $F(3, 654) = 8.96, p < .001, \text{adj. } R^2 = .35$ . Perceived protective social factors in relation to family and teachers added statistically significantly to the prediction,  $p < .05$  (Table 5).

<Insert Table 5 about here>

## **Discussion**

This initial analysis, and one of the first of its kind to be carried out with African youth, establishes a number of important links between perceived benefits of gambling, gambling behaviour, stress responses and social protective factors. Sports betting was the most predominant form of gambling with males having higher participation on all forms of gambling than females. This is consistent with findings that sports betting is the most common form of gambling among young people (33), and significantly greater proportions of males than females participate in gambling (34,35). This finding may be due to the fact that football is a passionate sport among Ghanaians with young people following the Ghana national football teams and major European football leagues with considerable enthusiasm. Sports betting venues have emerged in, practically, every corner in Accra (the capital of Ghana) where young people could be seen betting on various matches on a daily basis. In addition, given that within the socio-

cultural setting of Ghana males are brought up to be boisterous and always show bravery, it comes as no surprise that males scored lower than females on attitude towards gambling, indicating a stronger positive attitude towards gambling. These reasons may be based on the knowledge that females are, on average, more risk averse than males in financial decision-making, and so are more likely to have a negative attitude toward gambling (36,37).

The results also showed that day-students had a more positive attitude towards gambling than boarding students. This could be explained in relation to the fact as day-students commute between home and school daily and are home during the weekends, they have more access to gambling venues than boarding students who need permission to leave the school premises, either during week days or weekends. Furthermore, it could be speculated that assuming that the parents or guardians of day students are gamblers, these students would be more likely to socially model their parents'/guardians gambling behaviour by merely seeing them participate in gambling. This social learning perspective suggests that children and adolescents are likely to imitate the gambling attitudes and behaviours of their family members (38).

The results also showed that second-year students participated more in gambling (sports betting) than third-year students. Generally, third-year students are older than second-year students, so this finding could be situated within the context of age differences in gambling and as such, will be similar to results of previous studies that found that older students are less likely to participate in gambling compared to younger students (36). As the duration of senior high school is three years, second year students may have thought they have plenty of time to spare and may use this time to engage in various social activities, including gambling. In all cases, high frequency

gamblers also had a positive attitude towards gambling and considered gambling to be a positive experience compared to non/low frequency gamblers (10,39).

In relation to school characteristics and ATG, results of this study showed that residential status and gender composition of the school significantly predicted ATG. As indicated previously, in view of the fact that day-students have more access to gambling venues and also see adults participating in gambling activities when they are not in school, compared to boarding students, we expect this to significantly contribute to the variance in attitude towards gambling (38). This could be understood in relation to the discussion on gender differences that advanced reasons why males are more likely to gamble. This notwithstanding, given the pubertal characteristics of adolescence, both males and females are more likely to want to ‘appear’ descent before the opposite sex by not engaging in social activities (such as gambling) which may be regarded as socially reprehensible (40).

Further to the role of school characteristics in youth’s ATG, although attainment did not significantly predict ATG, the results pointed to the fact that as examination grades increased, attitude towards gambling decreased indicating that educational attainment influences students have a negative attitude towards gambling. While the nature of the association between educational achievement and attitude towards gambling is unclear, it is expected that young people who likely have a gambling problem would have lower overall academic achievement and increased incidence of learning problems or learning disabilities (39). This may explain the results of some research studies that found a negative association between gambling and academic success (18,19).

Finally, the results showed that where young people do not perceive social protection, they were more prone to a positive ATG and participate in all types of gambling (25). Having strong family connections and agreeing their emotional needs are being met would indicate a lower need for adolescent to participate in the lotteries (22). Overall, the higher the perceived family and teachers' sensitivity, the more likely the student saw gambling as unnecessary. It could be speculated that students who perceive their teachers to be supportive may become interested in school activities and so will receive advice from their teachers, for example, on the disadvantages or consequences of gambling.

There are some limitations to this study. First, the study used only second-year and third-year senior high school students, excluding much younger students from the study. Therefore, the generalisation of the results to all students in senior high schools in Ghana should be done with this fact in mind. Also, the extent to which the findings can be generalized to youth in rural areas is quite limited as all the schools that participated in the study are located in an urban area. Due to the observational nature of the study, causal interpretations or the temporal sequence of the findings cannot be determined. Furthermore, as this study used a cross-sectional design without first year students (who are much younger), future studies should include much younger students, perhaps, include those in junior high schools in order to unravel the developmental trajectories vis-à-vis participation and attitude towards gambling overtime. Also, gambling is considered inappropriate especially from a religious point of view in Ghana. However, due to its initial focus this study did not include a measure on religiosity to examine its association, particularly, with ATG. It would be imperative for future studies to include measures of

religiosity/spirituality with respect to gambling studies in Ghana. Finally, the measurement of gambling participation was not robust enough - there is no time frame, and actual frequency, in addition to understanding the way this gambling is occurring.

## **Conclusion**

This study has presented an initial analysis, one of the first of its kind to be carried out with African youth, which establishes a number of important links between demographic factors, school characteristic and attitudes towards gambling and perceived protective social factors. Whether gambling per se could be considered a stressor needs unpacking. Normal social play of any form of gambling should be considered a buffer of sorts. That is, non-problematic play especially in a social setting should be seen as harmless. However, when does this play change from being a pleasant social/individual activity to harmful? Perceived protective social factors could protect young people from participating in harmful gambling which consequently would influence adolescents to have a negative attitude towards gambling.

**Acknowledgments:** Our gratitude to the students, staff and schools who participated in this study, without them this study would not have been possible.

**Conflicts of interest:** All authors declare that they have no conflict of interest.

**Funding:** This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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