

## **Social and Environmental Risks of Problematic Gambling Disorder among Adolescence in Wollega Zonal Town**

Getu Tadele \*

*Lecturer, Department of Behavioral Science, College of Education and Behavioral Science, Post Box No: 395, Nekemte, Ethiopia*

---

**Abstract:** This study explored social and environmental risk factors of problematic gambling in six schools in Wollega zonal town, West Ethiopia, among students (N = 300) ranging from 14 to 22 years of age and methods was snowball sampling used. The researcher was used questionnaire to gather standardized tools to assess the extent of adolescence problematic gambling disorder. Data analyzed were using statistical methods descriptive, Pearson Correlation regression and variance was used. Results from the cross-sectional survey showed that personal feelings (self-esteem, false perceptions about winning, drug abuse), social factors (peer influence, parental gambling), and environmental factors (accessibility of gambling venues, advertisements) were significant correlates of problematic gambling disorder. Regression analysis show significant univariate correlates explained that 34.9 % of the variance in problematic gambling disorder with significant unique predictions for drug abuse, psychological impacts, and social impacts. The study also revealed that most frequently playing reasons for gambling were entertainment, killing time, and peer influence. Among the identified types of gambling activities, the most prevalent ones were playing cards followed by flipping coin and pool gambling while quick drawing was among the least reported gambling activities. There exist high rates of risk taking behavior during adolescence, including with behavior like gambling that have addictive potential and carry associated risks factors. By doing so it provides invaluable information for the systematic design and evaluation of evidence-based educational interventions to prevent gambling disorder during adolescents. For further researcher needs to focus on understanding of the students gambling disorder (involvement and addiction), providing intervention targets for the evidence-based design of educational interventions to prevent gambling disorder.

**Key Word:** Gambling, Adolescence, problematic gambling, disorder, Behavior

---

Date of Submission: 03-04-2019

Date of acceptance: 18-04-2019

---

### **I. INTRODUCTION**

Gambling disorder is a psychiatric condition characterized by persistent and recurrent maladaptive patterns of gambling behavior, leading to impaired functioning. It is associated with reduced quality of life, and high rates of bankruptcy, divorce, and incarceration (Grant, 2001). Although most people who engage in one or more forms of gambling do so responsibly and without undue negative impact on life, some individuals find that they become preoccupied with gambling and it has multiple negative consequences. For these people, their gambling behavior has devastating consequences that impact the individual, his or her family, and society (Hodgins, Stea, and Grant., 2011).

Gambling-related problems experienced by adolescent gambling disorder Derevensky and Gupta (2000) performed an item analysis on the endorsement rates using the DSM-IV-J gambling screen. Their results revealed that 91% of adolescent and young adult pathological gamblers reported a preoccupation with gambling; 85% indicated chasing their losses; 70% lied to family members, peers and friends about their gambling behavior; 61% used their lunch money and/or allowance for gambling; 61% became tense and restless when trying to reduce their gambling; 57% reported spending increasing amounts of money gambling; 52% indicated gambling as a way of escaping problems; 27% reported missing school (more than 5 times) to gamble; 24% stole money from a family member to gamble without their knowledge; 24% sought help for serious financial concerns resulting from their gambling; 21% developed familial problems resulting from their gambling behavior; and 12% reported having stolen money from outside the family to gamble.

With the expansion of gambling venues, including the Internet, adolescents are widely engaging in gambling activities. Gambling disorder affects only a small minority of individuals, the negative consequences are usually widespread with serious psychological, social, and economic implications not only for the individual gambler, but also bearing severe personal and economic costs for family members and the wider community and society (Derevensky et al. 2004; Ellenbogen et al. 2007; Lesieur 1998; Shaffer and Korn, 2002). In adolescents,

gambling disorder has been shown to result in increased delinquency and crime, the disruption of relationships with family and peers, and the impairment of academic performance and work activities (Derevensky and Gupta, 1998).

However, Problem gambling in the Ethiopia is becoming a not serious public health issue for Adolescence. Gambling is not inherently pathological, immoral, or associated with any psychological problem even if some cultural, economic, racial and ethnic groups may be at higher risk of developing pathological gambling behavior or disorder (Blume, 2005). Gambling in Ethiopia is not technically illegal and formal big business. However, the National Lottery Administration (NLA) Ethiopia has the role of regulating and controlling the activities related to gambling NLA Ethiopia, 1961). Though the regulation and controlling is not very effective to prevent adolescents from engagement in gambling and indulge themselves. Yet, Abdi (2011),) indicates, about 6.43% of adolescents at high schools among 73% reported that they had participated or are currently participating in gambling activities. Generally, this study researcher was surveyed the social and environmental risk factors of problematic gambling in Ethiopia with a specific focus on adolescents as these are most vulnerable to getting involved in gambling due to the high unemployment rates.

With respect to the context of Ethiopia, gambling is not technically illegal. Studies indicate that gambling is increasingly becoming one of the most popular leisure activities among adolescents worldwide, with rates of gambling disorder being higher in adolescents than in adults (Derevensky et al. 2004; Dickson and Derevensky 2006; Winters et al. 2002). While gambling is widely accepted as a form of entertainment, gambling disorder remains a social and public health issue. In the streets of the Ethiopia, there are plenty of gambling activities played for money with state-owned lotteries, play stations, pool houses, and table football being the most prevalent ones. To date, there is no scientific research conducted on gambling in Wollega, even in Ethiopian in my knowledge. Therefore, it is imperative to have cultural specific research findings on gambling in order to deal with the risk factors and other psychosocial and behavioral correlates of problematic gambling. In this research study was surveyed the social and environmental risk factors of problematic gambling disorder in Ethiopia with a specific focus on adolescents as these are most vulnerable to getting involved in gambling due to the high unemployment rates.

## **II. METHODS AND MATERIALS**

### **Design the research**

This study adopted a survey research design in order to explore risks factors of gambling disorder from Social and Environmental risks of preparatory school adolescence students in Wollega Zonal towns.

### **Population and Sampling**

The population of this study was consisting of in-school adolescents who are in government preparatory schools in the four Wollega Zones in the year 2016/17. Two preparatory schools from Nekemte, two preparatory school from Gihmbi, and One preparatory school from Dambi Dollo and Shambu town were purposively selected from each zone; hence, 6 schools was included in the study. Fifty students were snowball sampling from each school and a total of 300 students were participating in the study.

### **Data Gathering Instruments**

The researcher was basically use questionnaire to capture data on the Social and Environmental Risk of gambling. The researcher was using standardized tools to assess the extent of adolescent gambling disorder in sample. The tool was the Diagnostic and Statistical Manual of Mental Health Fourth-Version Adapted from Juveniles (DSM-IV-J) checklist which was developed by Fisher and was taken from Rainone and Gallati (2007). The DSM-IV-J is a 12-item checklist which assesses nine dimensions of problematic gambling: progression and preoccupation, tolerance, withdrawal and loss of control, escape, chasing, lies and deception, illegal acts, family and academic disruptions, and financial bailout.

### **Participants and Procedures**

A cross-sectional survey study was conducted among regularly attending preparatory school adolescents in Wollega Zonal town. At the time, in three Wollega zone there were about 6 preparatory schools with a total of 8432 students, 2017). In each of the schools, the researcher contacted classroom teachers for their willingness to cooperate in data collection by devoting a one period (50 min) class meeting. Following the permission of the schools and with the help of the teachers, the researcher approached the students. The researcher explained the objectives of the study for the students and assured them about the confidentiality of their responses. Students did not provide their names and were not asked any other personal identification. Only students who had played any game in money or betted on unknown results were eligible to fill in the questionnaires. But students who did not play any game in money or bet on unknown results were also counted in order to assess the frequency of gambling in the target population. The students were instructed to finish the

questionnaire in the class within the 50 min class meeting and return the questionnaire to their classroom teachers or researcher before they left the class. Out of the 300 target population, 244 (about 71 % with males 41 % and females 30 %) reported that they have gambled or have been gambling and willing to fill in the questionnaire. In the data processing and reporting, 56 questionnaires were excluded due to incomplete completion and non-return.

**Data Analysis’s**

After the necessary data were collected and coded, statistical tests were performed using the Statistical Package for Social Sciences (SPSS) for Window, version 21.0. Statistical methods including descriptive statistics, Pearson correlation, standard multiple linear regression were used in the analysis.

Descriptive statistics were done to summarize the data; Pearson correlation was computed to determine the association of social and environmental risks; and standard multiple linear regression was used to examine whether the dependent variable (Gambling disorder) was regressed on the independent variables (social and environmental risks) or not.

**III. RESULTS**

**Percentage Distribution of the Participants in terms of Some Background Characteristics** This study result, out of the 300 responses, 56 responses were discarded due to incomplete filled-out questionnaires and the responses of 244 students of grade 11 (150 or 60.5 %) and grade 12 (94 or 34.2 %) were analyzed. Participants of the study comprise of 162 (66.39%) male and 82 (33.61%) female students. Moreover, When father’s/male guardian’s level of education is considered, most of the participants (90 or 36.88%) reported that their fathers/male guardians attended Certificate/Diploma, while (74 or 30.32%), (29 or 11.88%), (28 or 11.47%), and (23 or 9.42%) indicated that their father’s/male guardian’s level of education was senior secondary, Primary/Junior secondary, first degree and above, and no formal education, respectively. See Table 1 for complete summary of the socio-demographic characteristics of the participants.

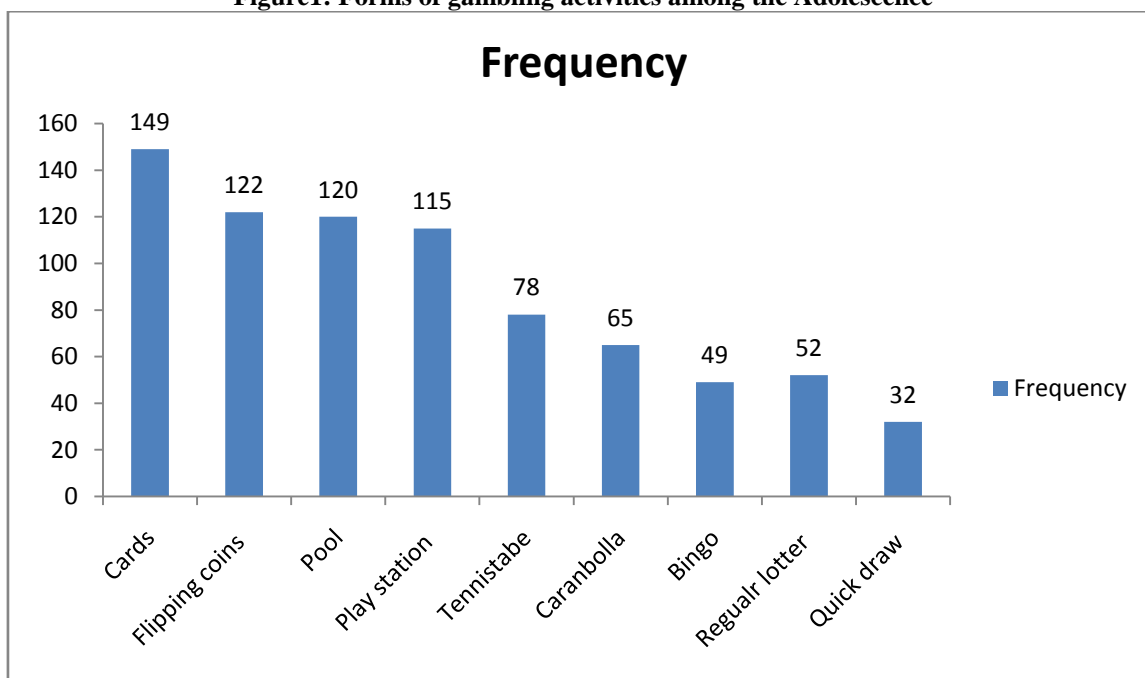
**Table 1: Numbers and Percentages of School Students in terms of Background Characteristics**

Background Characteristics		N	%
<b>Grade</b>	11	150	61.47
	12	94	38.53
<b>Sex</b>	Male	162	66.39
	Female	82	33.61
<b>Family types</b>	Intact		
	Separated/divorced	225	86.2
	Remarried	15	5.7
	Lives with relatives	17	6.5
<b>Father’s/male guardian’s level of education</b>	No formal education	23	9.42
	Primary/Junior secondary	29	11.88
	Senior secondary	74	30.32
	Certificate/Diploma	90	36.88
	First degree and above	28	11.47
<b>Family Monthly Income</b>	700–1,000	40	16.39
	1,001–1,500	44	18.08
	1,500–2,000	32	13.11
	2,000–2,500	53	21.72
	2,500–3,000	50	20.49
	>3,000	42	17.2

**Forms of Gambling Activities among the Adolescents**

Adolescents engaged in various forms of gambling activities. The questionnaire identified 10 forms of local gambling activities. In figure, 1 reveals that the most frequently reported form of gambling activity is playing cards followed by flipping coins and pool gambling while quick drawing is among the least reported forms.

Figure1: Forms of gambling activities among the Adolescence



**Risky Gambling Behavior**

The researcher was used the DSM-IV-J tools to assess the extent to which adolescents were at risk for gambling disorder or were indeed problematic gamblers and non-compulsive or compulsive gamblers. Table 3 shows the distribution of respondents across the continuum of gambling behaviors (from social/non-problematic gambling to at risk for severe problematic gambling and problematic gambling) on the DSM-IV-J tools.

Table 3: The distribution of respondents across the continuum of gambling categories of on DSM-IV-J and GA-20 for males and females

Tools	Category	Total (%)	Frequency (%)	
			Male	Female
DSM-IV-J	Social gamblers	143 (58.64)	81 (33.19)	62 (25.4)
	At risk for severe problematic gambling	83 (34)	69 (28.27)	14 (5.73)
	Probable problematic gambler	18 (7.37)	12 (4.91)	6 (2.45)
	Total	244 (100)	154 (100)	109 (100)

\* Significant at  $p = 0.05$

According to the DSM-IV-J checklist, the majority of our samples (58.6 %) were non-problematic or social gamblers, while 34 % were at risk for severe problematic gambling and 7.3 % were probable problematic/pathological.

**Correlations among Variables of Interest**

The result in table 4 revealed that the relationship between the study variables, including the univariate associations between the social and environmental factors and the two measures of problematic gambling are presented (see Table 4).

Table 4: Results of Correlation Analysis among Variables of Interest

Measures	DSM-IV-J	Social factors	Environmental factors	Drug abuse	Psychological impacts	Social impacts	Economic impacts
DSM-IV-J	1						
Social factors	0.254**	1					
Environmental factors	0.297**	0.549**	1				

Measures	DSM-IV-J	Social factors	Environmental factors	Drug abuse	Psychological impacts	Social impacts	Economic impacts
Drug abuse	0.389**	0.089	0.203**	1			
Psychological impacts	0.417**	0.439**	0.462**	0.218**	1		
Social impacts	0.502**	0.370**	0.469**	0.295**	0.554**	1	
Economic impacts	0.477**	0.383**	0.411**	0.341**	0.548**	0.699**	1

\*\* Correlation is significant at the 0.01 level (2-tailed)

According to table 4 shows that correlated to see social factor .25 were approximately weak and positive association with DSM-IV-J gambling disorder. This is for the social risk factors, positive associations with measures of gambling disorder were found for personal feelings, drug abuse and perceived psychological, social and economic impacts. In addition, social risk factors and availability of gambling venues were positively correlated with both measures of gambling disorder.

**Table 5: Relative Contributions of the Predictor Variables on Gambling Disorders**

Model	B	SE B	β	t	P
Social factors	.005	.011	.027	.407	.684
Environmental factor	-.002	-.021	-.237	-.150	.881
Drug abuse	.093	.021	.237	4.332	.000**
Psychological impact	.045	.021	.141	2.117	0.035
Social impacts	.058	.017	.261	3.439	.001**
Economic impacts	.050	.030	.127	1.67	.096

$R^2 = 0.349$ ,  $F(7, 253) = 19.398$ ,  $p < 0.01$ , \*\* =  $p < 0.01$ , \* =  $p = 0.05$

A regression analysis was computed, with personal, social and environmental risks of gambling disorder entered as predictors and gambling disorder as the dependent variables. The analysis yielded a significantly result  $F(7, 253) = 19.398$ ,  $p < 0.01$ ,  $p = 0.05$ . This implied that the predictor variable jointly and significantly predicted the dependent variable( gambling disorders). A regression analysis further revealed that the predictor variables, when combined together accounted for more than 34% of the total variance observed in gambling disorder( $R^2 = 0.349$ ).

Beta weights of each of the predictor variables were examined to determine which of the independent variables contributed uniquely to the variance explained in problematic gambling disorder (in table 5). Drug abuse and social impact are contributed significantly to the variance in the problematic gambling in the positive direction ( $t = 4.332$ ;  $p = .000$ ), ( $t = 3.439$ ;  $p = 0.01$ ), while the contribution of bothe psychological impact and economical impact were non-significant ( $t = 2.117$ ;  $p = 0.035$ ); ( $t = 1.67$   $p = .096$ ) respectively.

#### IV. DISCUSSION

The study showed that social factors (peer and family risk factors), and environmental factors (media advertisement and availability of gambling venues) contribute to problematic gambling among high school students in Wollega town. International studies on gambling disorder reveal similar risk factors for problematic gambling, among which risk seeking tendencies, low self-esteem, depression and suicide ideation; social factors including peer influences and parental gambling; and environmental factors like advertisement on gambling have been found to be positively associated with problematic gambling continuum (e.g., Carlson and Moore 1998; Dane et al. 2004; Delfabbro et al. 2005; Lambos et al. 2007; Winters et al. 2002). The research findings indicated that the most frequently played gambling forms among the preparatory school adolescence are playing cards, flipping coins, pool gambling and play station, while quick drawing is among the least reported. Delfabbro et al. (2005) in their study of adolescent gambling in Australian Capital Territory (ACT) of students of ages between 7 and 12 years revealed that private card games (39.8 %) and bingo/scratchies (40.5 %) were the most frequently reported gambling activities while betting on racing and sporting events were also popular (32 and 26 % respectively). In another study conducted among adolescents in Oregon (Carlson and Moore, 1998) purchasing raffle tickets (41 %) was the most frequently cited gambling activity, followed by betting on sports with friends or relatives (32 %); playing cards (31 %), and betting on games of skill, such as pool or bowling (25 %). A game typical to wollega town is pool, which ranked 3<sup>rd</sup> among the identified 9 gambling

activities and about 1 out of 4 gamblers play pool. Pool is very closely similar with the Italian game of Bocette (<http://billiardtraveler.blogspot.com/2011/10/billiards-in-hottest-inhabited-village.html>). The variations in the prevalence of gambling activities may also be related to the differences in cultural backgrounds, age, legal and other social aspects of the adolescent gamblers.

## V. CONCLUSION

While adolescence is only a short period of one's life, it is a time of critical developmental change and growth. There exist high rates of risk taking behavior during adolescence, including with behavior like gambling that have addictive potential and carry associated risks factors (personal, drug abuse, perceived psychological, social risk factors and availabilities of gambling venue positively correlated with gambling disorder and are significant unique contribution as well predictions for drug abuse, psychological impacts, & social impacts). By doing so it provides invaluable information for the systematic design and evaluation of evidence-based educational interventions to prevent gambling disorder in school adolescents. For further researcher needs to focus on understanding of the students gambling disorder (involvement and addiction), providing intervention targets for the evidence-based design of educational interventions to prevent gambling disorder.

## ACKNOWLEDGEMENT

I would like to thank the Wollega University its funding to conduct this research study.

## REFERENCE

- [1]. Abdi, T. A. (2011). *Adolescent gambling in Addis Ababa, Ethiopia* (Master's thesis). Prevalence, causal factors and impacts of problem gambling in some selected high schools in Addis Ababa, Ethiopia. VDM Verlag. ISBN: 978-3-639-35393-8.
- [2]. Carlson, M. & Moore, T. (1998). *Adolescent gambling in Oregon: A report to the Oregon Gambling Addiction Treatment Foundation*. Available at: [www.gamblingaddiction.org](http://www.gamblingaddiction.org).
- [3]. Dane, A., McPhee, J., Root, L., & Derevensky, J. (2004): *Parental socialization of youth gambling*. Final Report to the Ontario Problem Gambling Research Centre (OPGRC).
- [4]. Delfabbro, P., Lahn, J., & Grabosky, P. (2005): *Adolescent gambling in the Australian Capital Territory*. Australian National University Center for Gambling Research. <http://gambling.anu.edu.au>.
- [5]. Derevensky J, Gupta R.(1998): Work in progress. Child and adolescent gambling problems: A program of reasearch. *Canadian Journal of School Psychology*.14(1):55–58.
- [6]. Derevensky, J., & Gupta, R. (2000). Prevalence estimates of adolescent gambling: A comparison of the SOGS-RA, DSM-IV-J, and the GA 20 Questions. *Journal of Gambling Studies*,16(2/3), 227–251.
- [7]. Dickson, L., & Derevensky, J. (2006): Equipping school psychologists to address another risky behavior: The case for understanding youth problem gambling. *Canadian Journal of School Psychology*,21(1/2), 59–72. Available at: <http://cjs.sagepub.com/content/21/1-2/59>.
- [8]. Ellenbogen S, Gupta R, Derevensky J.(2007): A cross-cultural study of gambling behavior among adolescents. *Journal of Gambling Study*.23:25–39. doi: 10.1007/s10899-006-9044-2.
- [9]. Grant JE, Kim SW (2001): Demographic and clinical features of 131 adult pathological gamblers. *The Journal of clinical psychiatry*. Dec ;62(12):957-962.
- [10]. Hodgins DC, Stea JN, Grant JE (2011): Gambling disorders. *Lancet*. Nov 26;378(9806):1874-1884.
- [11]. Lesieur, H. (1998). *Costs and treatments of pathological gambling*. *Annals of the American Academy of Political and Social Science, gambling: socio-economic impacts and public policy*,556, 153–171. Sage, in association with the American Academy of Political and Social Science. Retrieved from <http://www.jstor.org/stable/1049336>.
- [12]. Jacobs, D. F. (2000): Juvenile gambling in North America: An analysis of long term trends and future prospects. *Journal of Gambling Studies*, 16, 119-152.
- [13]. Lambos, C., Delfabbro, P., & Puglies, S. (2007): *Adolescent gambling in South Australia*. Report prepared on behalf of the Department for Education and Children's Services for the Independent Gambling Authority of South Australia.
- [14]. National Research Council (1999): *Pathological gambling: A critical review*. Washington, DC:National Academy Press.
- [15]. Rainone, G. & Gallati, J. (2007): *Gambling behaviors and problem gambling among adolescents in New York State*. Initial findings from the 2006 OASAS school survey. NYS Office of Alcoholism and Drug Abuse Services. Retrieved September 11, 2010 from <http://www.oasas.state.ny.us/gambling/documents/gamblingSS110107.pdf>.
- [16]. Shaffer H, Korn D.(2002). Gambling and related mental disorders: A public health analysis. *Annual Review of Public Health*. 2002;23: 171–212. doi: 10.1146/annurev.publhealth.23.100901.140532.

- [17]. Shaffer, H. J., & Hall, M. N. (1996): Estimating prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. *Journal of Gambling Studies*, *12*, 193-214.
- [18]. Winters, K., Stinchfield, R., Botzet, A., & Anderson, N. (2002). A prospective study of youth gambling behaviors. *Psychology of Addictive Behaviors*.*16*(1), 3–9. Retrieved August 2, 2011 from <http://www.austgamingcouncil.org.au/images/pdf/eLibrary/2396.pdf>.

Getu Tadele. "Social and Environmental Risks of Problematic Gambling Disorder among Adolescence in Wollega Zonal Town." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*. vol. 24 no. 04, 2019, pp. 10-16.