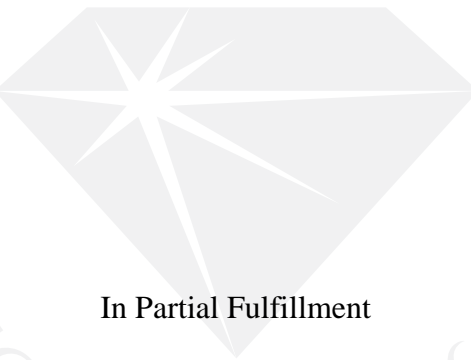


ADOLESCENT GAMBLING IN IMPHAL (MANIPUR), INDIA



ADOLESCENT GAMBLING IN IMPHAL (MANIPUR), INDIA

A Thesis Presented to
The Graduate School of Bangkok University



In Partial Fulfillment
of the Requirements for the Degree
Master of Business Administration

by

Pisgahbuan Gonmei

2016



©2016

Pisgahbuan Gonmei

All Rights Reserved


This thesis has been approved by
the Graduate School
Bangkok University

Title : Adolescent Gambling in Imphal (Manipur), India

Author : Pisgahbuan Gonmei

Thesis Committee :

Thesis Advisor




[Signature]
(Dr. Vanchai Ariyabuddhiphongs)

Thesis Co-advisor




[Signature]
(Dr. Sumas Wongsunopparat)

Graduate School Representative




(Asst. Prof. Dr. Kasemson Pipatsirisak)

External Representative



(Dr. Jiraphan Skuna)



[Signature]
(Dr. Sansanee Thebpanya)

Dean of the Graduate School

[Signature]
1 April 2016

Gonmei, P. M.B.A., April 2016, Graduate School, Bangkok University

Adolescent gambling in Imphal (Manipur), India (87 pp.)

Advisor of thesis: Vanchai Ariyabuddhiphongs, Ph.D.

ABSTRACT

This study aimed to examine the prevalence of gambling participation, gambling factors and gambling behavior of seventh to twelfth grade adolescents in Imphal, Manipur (India). Three hundred and eighty four school students (grade 7-12) in Imphal, Manipur completed the DSM-IV-J gambling screen along with a questionnaire devised by the researcher inquiring about their gambling behavior, including items assessing the types of gambling activities in which they engage, frequency of involvement and reasons of gambling.

The results indicate that, in general, 42.2% of the ninth to twelfth grade students had gambled in some form over the past year. The most popular gambling activities were sports betting, Housie Bumper Draw (Bingo) and ludu (dice). Most of the respondents (90%) in Imphal, Manipur gambled for fun and enjoyment. When the impact of personal factors on gambling participation was examined, the factors that predicted significant variance of gambling participation were gender, education level and ethnic group. And the environmental factors were availability of games, family, friends, media and technology. A third of participants (35.2%) have gambled few times a year and 27.8% of the participants gambled once a year. The rate of pathological gambling was 1.8% as measured by the DSM-IV-J. Gender differences were evident, with males engaging in gambling activities more than females.

Differences in games were found, with males more attracted to sports betting, internet games and females were more attracted to ludu (dice) and lottery games. In this study, adolescent gambling behavior couldn't predict problem gambling behavior as well as adult gambling behavior. Adolescent gambling awareness and prevention issues are addressed.



Approved: _____


[Handwritten signature]

Signature of Advisor

ACKNOWLEDGEMENT

I would not have been able to complete this study without the support of many important people over the past two years. Firstly, I would like to express my gratitude to my advisor, Dr. Vanchai Ariyabuddhipongs, without whose support this thesis would not have been possible, not only for time and extreme patience, but also for his intellectual contributions to my development as a real MBA graduate student.

I would like to thank my thesis co-advisor Dr. Sumas Wongsunopparat, for his encouragement and insightful comments which enhanced and improved this study in various ways.

I also thank Dr. Vanchai Ariyabuddhipongs, Dr. Sumas Wongsunopparat and external committee for appreciating my research strengths and patiently encouraging me to improve in my weak areas. Graduate school can be a difficult experience. I am proud to say that my experience in Bangkok University MBA program was intellectually exciting and there was much for me to learn from that.

I thank all the participants who were kind enough to respond the questionnaire in this survey.

Last but not the least, I would like to thank my parents and friends for their love and unfailing support throughout my life.

TABLE OF CONTENTS

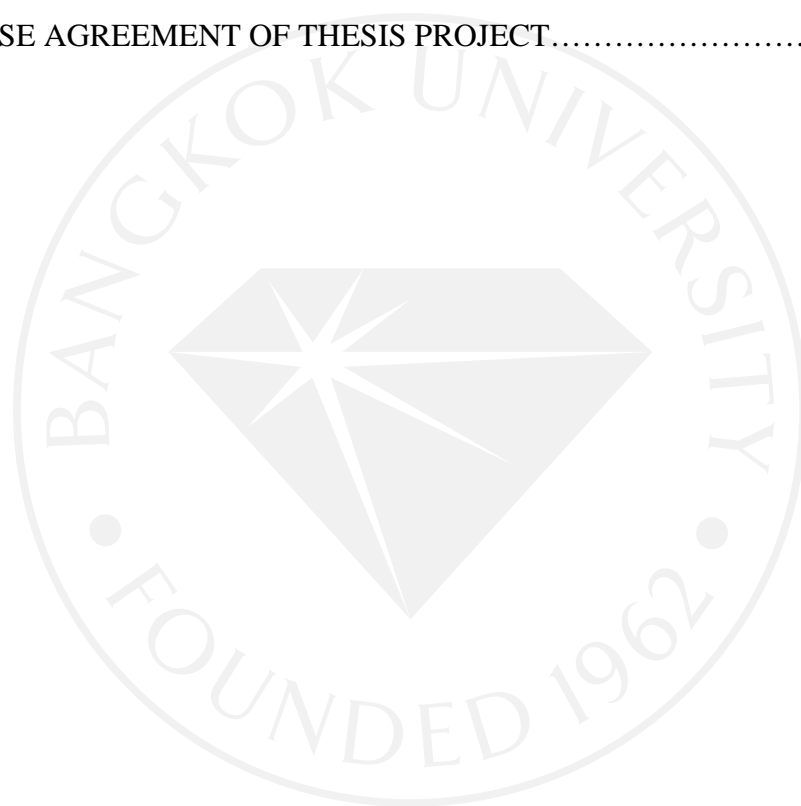
	Page
ABSTRACT.....	iv
ACKNOWLEDGEMENT.....	vi
LIST OF TABLES.....	x
LIST OF FIGURES.....	xii
CHAPTER 1: INTRODUCTION	1
Rationale and Problem Statement.....	1
Objectives of Study.....	5
Scope of Study.....	5
Research Questions.....	7
Significance of Study.....	8
Benefits of Study.....	10
Limitations of Study.....	10
Definition of Terms.....	11
CHAPTER 2: LITERATURE REVIEW	13
Introduction.....	13
Conceptual Framework	16
Personal Factors.....	18
Environmental Factors	20
Conceptual Framework for Imphal, Manipur	27
CHAPTER 3: METHODOLOGY.....	30
Participants.....	30

TABLE OF CONTENTS (Continued)

	Page
CHAPTER 3: METHODOLOGY (Continued)	
Research Instruments.....	32
Data Collection Procedure.....	35
CHAPTER 4: RESULTS.....	37
Results.....	37
Personal Factors.....	37
Environmental Factors.....	43
Prediction of Gambling Behavior.....	46
Adolescents Gambling Behavior.....	47
Adolescents Gambling Problem.....	50
CHAPTER 5. DISCUSSIONS.....	54
Discussions.....	54
Gambling Participation.....	55
Factors of Adolescents Gambling	56
Gambling Behavior.....	57
Preventive Measures	59
Limitations	61
Future Directions.....	62
Conclusions	64
BIBLIOGRAPHY.....	65

TABLE OF CONTENTS (Continued)

	Page
APPENDICES77
Questionnaires in English78
Map of Imphal (Manipur), India.....	..84
BIODATA85
LICENSE AGREEMENT OF THESIS PROJECT.....	..87



LIST OF TABLES

	Page
Table 3.1	Demographic Characteristics of the Sample.....31
Table 4.1	Respondents Cross Tabulation of Gender and Types of Gambling.....38
Table 4.2	Cross Tabulation of Respondents Gender and Frequency of Gambling in a Year.....39
Table 4.3	Cross Tabulation of Respondents' Age and Gambling Participation of Sample.....40
Table 4.4	Cross Tabulation of Education Level and Frequency of Gambling....41
Table 4.5	Cross Tabulation of Respondents' Ethnic Group and Types of Game.....42
Table 4.6	Cross Tabulation of Respondents' Religion and Types of Game.....43
Table 4.7	Frequency of Games Gambled in Imphal.....44
Table 4.8	Independent Factors Predicting Adolescent Gambling Participation in Imphal.....46
Table 4.9	The Numbers of Games the Respondents Played in a Year.....47
Table 4.10	Frequency of Gambling.....48
Table 4.11	DSM-IV-J's Reporting Gambling Problem.....50
Table 4.12	Cross Tabulation of Responders' Gender and Frequency of Problem Gambling.....50
Table 4.13	Percentage of Affirmative Responses Endorsed to Each Question of the DSM-IV-J.....51

LIST OF TABLES (Continued)

	Page
Table 4.14 Type of Game and DSM-IV-J Cross Tabulation of Sample.....	52
Table 4.15 Cross Tabulation of Responder's Frequency and Type of Gambling.....	53



LIST OF FIGURES

	Page
Figure 2.1 Conceptual Framework.....	17
Figure 2.2 Conceptual Framework for Adolescent Gambling in Imphal, Manipur.....	28



CHAPTER 1

INTRODUCTION

Rationale and Problem Statement

Though adolescence is a time of good health (Holden, 1995), risk-taking behaviors are common among the adolescents. These high risk behaviors led to several crimes such as stealing, gambling and fighting (Nischal, Agarwal, & Agarwal, 2013). Adolescent often liked to be a part of adult (Gupta & Derevensky, 1998) and the adolescents in Imphal, India are often seen participating in sports gambling, game of skills, lotteries and other activities with the adults. Adolescents are very vulnerable and are exposed to many risks including gambling.

Gambling is illegal in India except in two states i.e. Sikkim and Goa as per the gambling act 1867 (Sayta, 2010). However gambling exist throughout the country. There was a press report recently regarding illegal gambling activities in Imphal. Gambling mafia was busted at Iboyaima Sumang Leela Sanglen by Manipur state police for hosting daily housie bumper draw (Express, 2013). There was also a report that volunteers of JCILPS Student Wing vandalized the stalls of a mela held at YAC ground, Imphal as gambling were held in mela venues (Reporter, 2015). Many youths were involved in rampant gambling with prizes of cars and a small vehicle (two wheelers) and this had been occurring regularly in Imphal (Hueiyen, 2013). Many organizations and their members had become busy in conducting housie bumper draws (bingo) to raise fund in Imphal. Many associations were maligning the true benefits of housie bumper draw by utilizing the game for personal profit. Registered

associations and organizations had cropped up to organize housie bumper draws in Imphal to earn money. Many young people were attracted towards this public gambling, thereby spoiling their properties and families. Housie bumper draws have been operated as business by some people. Many housie bumper draw enthusiasts of the city were indulging in this business almost regularly without taking care for their daily works (Hueiyen, 2013).

Socially, Manipur society frown upon gambling. For instance, playing cards whether for money/non-betting or not, is considered as illegal and the religious codes and beliefs system do not encourage it. However some forms of gambling are accepted by the society if it penetrates into the social system. There are some clubs namely Thangmeiband United Club, Thangmeiband Apunba Nupi Lup (Imphal) and some local organizations such as football clubs, churches, students unions etc. And these clubs may conduct housie bumper draw and lottery twice a year to raise development funds in Manipur. These organizations who upheld the practices of lottery and housie bumper draw are thought to be authentic and sanction by the social norms. And these organizations organized housie bumper draw and lottery occasionally such as Yaoshang, Lai Haraoba, Kut, Lui-Ngai-Ni, New Year, Christmas, Diwali, etc. So there are many youths and children in Imphal (Manipur), who participate in such events. However militant groups namely Kangleipak Communist Party (KCP) have been against to any forms of gambling in Manipur soil so KCP bombed and killed 17 people and injured 3 in response of gambling during Diwali festival (Osborne, 2012). So despite the illegality of gambling in the state, many youths and children have engaged in many forms of gambling in Imphal

(Manipur). Government of Manipur is not reacting to any issues towards public gambling. And preventive measures of illegal gambling were not taken effectively by the government of Manipur (Hueiyen, 2013).

Some students at the age of 11 years old are seen playing cards games, stickers, stamps, dice tricks in schools in Manipur. They usually gamble for fun and enjoyment during the lunch break or after school. Some students perhaps gamble with no prize or with no value; however this will further leads to gambling. So adolescents may started gambling at the very early age i.e. 11 years old or of grade 5 (Turner, Macdonald, Bartoshuk, & Zangeneh, 2007) despite of not reaching legal age to gamble. The rate of adolescents participating in gambling was high (Gupta & Derevensky, 1998) and the present generation of adolescents participated in more gambling than did the previous generations (Jacobs, 2000). Adolescents have shown very high risk of developing gambling problems (Jacobs, 2005).

There are some gamblers in Imphal who seem to lose properties in the form of field, land, wealth and other belongings. And this further leads to broken family, unfair treatment of the children and kids, divorce and fights in the family (Hueiyen, 2013). Most of the gamblers avoid social gatherings and crowds or meeting people where gatherings and meetings are so common in Manipur society. They find pleasure in solitary confinement. Some people gamble for pleasure, leisure, to kill time or boredom and profit. But the age and range of people who gamble in Manipur may differs. Most of the problem gamblers consist of school drop-out youths, the local goons, the street boys and those people who usually practices anti-social elements. The practices of gambling and involving in a gambling may arise due to bad parenting

and peer group pressure. In a village set up, most of the young people i.e. youths and teenagers gamble to find leisure. They mostly gamble not for their livelihood but to kill boredom. Some people have no access to computer, TV or any electronic devices for gambling so they gamble by playing cards. But this may change in Imphal when technology and internet are accessible. There are some odd gambling such as betting on hunting, fishing, and cock fighting in some parts of Manipur. And there are other traditional forms of gambling and such gambling differs from place to place. The bureaucrats and capitalists may gamble using their surplus of wealth and money. There are grown up people who gamble for profit and become addicted to drugs and intoxicants. And this may further contributed to the highest rate of HIV positive in the country as the main cause of HIV transmission is mostly from injecting drugs (Sarkar et al., 2012). As HIV related deaths are increasing in Manipur, the number of widows and orphans are also increasing experiencing poor health, poverty, social isolation and discrimination. So the impact of gambling may differ from person to person, game to game and it may impact the society into a great extent.

Pathological gambling rates among adolescents were two to four times (Ladouceur, Blaszczynski, & Pelletier, 2004) than that of the adult (Hardoon & Derevensky, 2002). Among the adolescents, four to eight percent had serious gambling issues (Jacobs, 2005). Adolescent problem gambling would lead to adult gambling problem (Winters, 2002), and influenced other problem behaviors and attitudes such as smoking, alcohol, other illicit drug use (Stinchfield, 2000), and other related problems at school (Gupta & Derevensky, 1998).

Substance use (Duhig, Maciejewski, Desai, Krishnan-Sarin, & Potenza, 2007), ethnic minorities (Ellenbogen, Gupta, & Derevensky, 2007), internet (Wood, Gupta, Derevensky, & Griffiths, 2004), media (Gavriel, Teichman, & Rahav, 2010), new technology (Griffiths & Barnes, 2008) and family (Delfabbro & Thrupp, 2003) influenced adolescent gambling and adolescent problem gambling.

Objectives of Study

The objective of the study is to explore adolescent gambling participation, adolescent gambling behavior and adolescent pathological gambling behavior in Imphal (Manipur), India.

Scope of Study

This is a purposive study so this study will carry out in the researcher's hometown in India. The study of adolescent gambling will carry out among the adolescents in Imphal (Manipur), India. Manipur literally means "A Jeweled land" lie deep within a lush green corner of north-east part of India. "A pretty place, more beautiful than many show places of the world" and Lt. Pandit Jawaharlal Nehru described Manipur as "Jewel of India". Manipur is also known as "A slice of Switzerland in India" for its natural beauty. Manipur is surrounded by blue hills with valley at the center, rich in art and tradition and surcharged with the nature's pristine glory (Department of Information Technology, 2014). Imphal is the capital of Manipur and is the center for culture and commercial activity. Manipur has a total population of 27,21,756 in 2011 and contributed 0.22% to the total population of India (Census, 2011b). Manipuri people have physical features similar to South East

Asian. Manipur population comprises of various ethnic groups (Panmei & Singh, 2013) and the people of Manipur have lived together in harmony for many generations (Manipur, 2014).

On the other hand, Manipur is called as “state of concern”, “sensitive area” or “disturbed area” (Economist, 2010) and may by worst case scenario have the highest militants groups in the north-east of India. These militant groups often instigate violence paralyzing every development in the state. The most serious heinous conflicts happened in the most beautiful locations (Guha, 2007). There have been many tensions between different ethnic groups or tribes and there have been several clashes between various ethnic groups. Imphal has experienced decades of conflict from ethno-nationalist separatism, inter-ethnic territorial disputes and counter-insurgency operations (McDuie-Ra, 2014). Despite of high literacy rate of 79.85% in Manipur (Census, 2011a), unemployment rate is high as 10.17% and the rate is increasing year by year (Commerce and Industries, 2013). Besides Manipur is one of the most corrupted and backward state in the country. Manipur after decades of independence is still way far behind in term of socio, economic, education, political, cultural and social development. Previous studies showed that movement for separate homeland, regionalism, tribalism, ethnic clash, crime, mass poverty etc. in the region are caused by backwardness of the region (Haokip, 2012). Manipur also unfortunately has one of the highest rate of HIV/AIDS (Sarkar et al., 2012) in the country with 1.22% of the population in the state being HIV positive (Economist, 2011). HIV who also reported positive among many adolescents and young adults in Manipur (Chibber & Khurranna, 2005). The chaos and confusions created in the state leads to many

youths of Manipur to indulge in odd jobs join the insurgent groups, take drugs abuse and gamble.

The rate of crimes and violence in Manipur are increasing rapidly. Reports said that highest rate of violent crimes was reported from Manipur (34.5%) in the year 2011 as compared to 20.4% at all-India level (Correspondent, 2011). So this study will investigate among the adolescents in Imphal, Manipur, India.

Research Questions

In order to achieve the objective of the study, a list of research questions are developed and given below:

Do the adolescents in Imphal (Manipur), India ever participated in any form of gambling in past years?

What are the common forms of gambling existing in Imphal (Manipur), India?

Which form of gambling is most frequently gambled by the adolescents in the state?

How often do they gamble?

How much money do they spend to gamble and how much do they make from gambling?

Do they gamble for prize?

How often do they win or lose?

Why do they gamble?

Are they satisfied gambling?

Will they gamble again in coming days?

Do they have any gambling problem?

What are the factors influencing them to gamble?

What are the impacts and consequences of adolescent gambling?

And lastly what are the preventive measures available to mitigate and tackle adolescent gambling problems?

Significance of Study

Many researchers have studied on adolescent gambling in many countries such as US (Richey, 1998), UK, England (Griffiths, 1991), Scotland (Moodie & Finnigan, 2006), Great Britain (Forrest & McHale, 2012), Iceland (Olason, Sigurdardottir, & Smari, 2006), Australia (Jackson, Dowling, Thomas, Bond, & Patton, 2008), Canada (Campbell, Derevensky, Meerkamper, & Cutajar, 2012) and New Zealand (Goodyear-Smith et al., 2006). No research on adolescent gambling in Imphal (Manipur) has ever been conducted.

Adolescents participation in gambling was relatively high (Derevensky, Gupta, & Magoon, 2004) and several researches have started to address youth and adolescent gambling issues (Campbell et al., 2012) in many countries. However none has yet raised issues on adolescent gambling in Imphal (Manipur) though there are many crimes, violations, conflicts, and many other issues related to adolescent gambling.

Researchers showed that more gamblers were found among ethnic and minorities groups. And gamblers belong to ethnic and minorities groups were reported to be more problematic. So study on gambling is crucial in Imphal, Manipur as Manipur is composed of more than 30 ethnic groups. Most of the ethnic groups have their own insurgent forces (Economist, 2010). There are a total of 34 insurgent groups demanding independence from India. Manipur has highest number of militant groups

in the north-east part of India. These militant groups often instigate violence paralyzing every development in the state. There are often strikes, protests, riot and curfew in the state. There was a report that there were 27 days of curfew and 135 days of economic blockage in the year 2010-11 (Singha, 2013). Schools and government offices were closed for many days due to the curfew in the state. And this led to many youths neglected and youths created many issues such as substance abuse, stealing, gambling etc.

There have been many tensions among different tribes. And there have been several clashes between Nagas and Kukis, Meeiteis and Muslims. Manipur unfortunately has one of the highest rate of HIV/AIDS (Sarkar et al., 2012) in India (Economist, 2011). Many researchers have raised these issues to come up with urgent preventive measures (Medhi et al., 2012). Counseling services were provided for issues of sexual activities, pregnancy and birth control (Chibber & Khurranna, 2005). But no one seem to have done any research related to gambling in the state though gambling leads to many crimes in Imphal, Manipur.

Gambling behavior in Imphal, Manipur is different from other countries. People in Imphal even bet on elections (Thokchom, 2007). Participating in gambling in the state is very easy as gambling venue is easily accessible. And gambling is often held at the play-ground, open field and even in a house (Hueiyen, 2013). There are some card games that even only two persons can play. Due to the poor infrastructure of entertainment and recreational facilities and services, people of Manipur gamble to kill their boredom or to have fun and enjoy their lives. There are few places to hang out for the adolescents in Imphal. There are only 2 small shopping malls and 13

restaurants in Imphal (ixigo, 2015). So many youths often ended up gambling for fun and enjoyment in their leisure time. And most of the people in Imphal, Manipur don't gamble for money but for fun and enjoyment. Socializing is one factor for gambling in the state as gatherings and socializing in Manipur is very common which provides an opportunities for the youths to have fun together such as by gambling, substance use leading to various crimes in the state. So this study will examine the adolescents gambling behaviour in Imphal, Manipur and predicts gambling problem.

Benefit

This study will highlight the gambling activities among the adolescents in Imphal. This study would send a message to inform and warn parents, teachers or educators, law and policy makers of the state on the factors and consequences of adolescent gambling. This study may discourage and prevent adolescents in Imphal from gambling in the future. This study may help law enforcement regarding gambling in the state. This study may also be able to raise an awareness of gambling issues and come up with preventive measures such as parenting or parents monitoring their children. This study may encourage government to restore law and order to mitigate the gambling issues for the people well-being and welfare development in the state. And lastly this study would link and leads to many other studies related to gambling in the state which would benefit the state.

Limitation

This is a purposive study and this study doesn't represent the whole India. Besides India is very diverse and can't be generalized by this study. Resources and

journals on gambling are very limited in Manipur, India. It seems no one has ever studied gambling in Manipur. So this study will not be able to cover many areas on gambling in the state. Some factors like government, venues etc. and concurrence behavior with substance abuse will be excluded to limit the scope of the study. Since gambling is illegal and sensitive in Manipur, some adolescents might not like to take part in the survey and it might take longer time to complete the study. This study is design for adolescence, consent and approval from parents is required but it will be hard and complicated to obtain so it is necessary to approach the school principal or headmaster instead. Some schools are run by Christians so most of the possible responders are likely to be Christians likewise schools run by Muslim, Kuki and Meitei will have more Muslim, Kuki and Meitei students respectively. So sample needs to be collected from various schools runs by various ethnic groups or religious schools if possible. Some adolescents might be scared or afraid of answering the truth so administer need to explain carefully before administering the survey that the data will be used only for study purpose and their information will be kept confidential. Also questionnaires are structured in English so younger adolescents might have doubts or problems to complete the survey. So to carry out this study successfully, more volunteers or administrators are needed to be available to help in time of need. Sending the completed survey questionnaires back to Bangkok may take little longer as postal service in Imphal is slow. Manipur's situation changes rapidly and any sudden situation may delay conducting the survey. So conducting the survey sooner is better to avoid all the unexpected situations which might delay this study.

Definition of Terms

Adolescence:

Adolescence is the time period between the beginning of puberty and adulthood (Cartaxo et al., 2013).

Adolescent:

Adolescent is a young person who is going through adolescence (Webster, 2015).

Gambling:

A person engages in gambling if he stakes or risks something of value upon the outcome of a contest of chance or a future contingent event not under his control or influence, upon an agreement or understanding that he or someone else will receive something of value in the event of the certain outcome (Lester, 2010).

Problem gambling:

Gambling addictions, also known as pathological gambling, compulsive gambling or problem gambling, are maladaptive patterns of gambling behavior that the individual persists with, despite negative consequences. Or pathological gambling is when betting becomes an addiction (Hartney, 2011).

CHAPTER 2

LITERATURE REVIEW

Introduction

Adolescence is a period of change from beginning of puberty to legal adulthood (Cartaxo et al., 2013). Compared to members of different age groups such as infants, children, adults and elderly persons, adolescents generally enjoy a time of good health (Holden, 1995). Risk-taking behaviors like gambling, substance use (Stewart & Kushner, 2005), unprotected sexual intercourse, not wearing helmet while riding motorcycle or not wearing seatbelt while in automobile are usual and common among adolescents (Cartaxo et al., 2013). Adolescents are also vulnerable to gambling and the number of adolescents participating in gambling has increased. Also increased adolescent problem gambling and the problems were recognized early (Jacobs, 2000).

Many researchers have conducted studies on adolescent gambling. Researchers in developed countries such as US, UK, Europe, Australia, Canada, England and New Zealand have shown that the number of adolescents participating in gambling was relatively high (Derevensky, Gupta, & Magoon, 2004) and several researches have started to address youth and adolescent gambling issues (Campbell, Derevensky, Meerkamper, & Cutajar, 2012). Adolescents' gambling increased rapidly and pathological gambling rates among adolescents were two to four times the adult's rate (Hardoon & Derevensky, 2002). Four to eight percent of adolescents were pathological gamblers and ten to fifteen percent of adolescents were at high risk to have gambling problems. Like an adult problem gamblers adolescents run after their losses, got engage into gambling and could not stop gambling (Gupta, Derevensky, &

Marget, 2004). So there was a relatively higher rate and risk of pathological gambling participation among the adolescents than the adult (Hardoon & Derevensky, 2002) and more pathological adolescents gamblers were found in families where parents gambled and misused drugs (Gerdner & Svensson, 2003).

The governments of most countries restricted adolescents from participation in gambling and other related substance use. Regardless of these restrictions, adolescents participated in various illegal gambling, drug use and alcohol use (Gillespie, 2005) and were likely to participate more than the past generation (Radecki & Thomas, 1994). Although not reaching age to gamble for the youths, they have been engaged in many forms of gambling and shown very high risk of developing gambling problems (Shaffer & Hall, 1996). No matter how the governments restricted and prohibited youths from gambling, most of the youths liked to be a part of adult and gambled at one point in their lives (Shaffer & Hall, 1996) and have serious gambling issues (Jacobs, 2004). There are many countries where gambling is illegal; however adolescents are often seen participating in many forms of gambling such as sports betting and internet gambling in countries where gambling is illegal (Srikanth & Mattamana, 2011). Interestingly many adolescents participated in illegal gambling in countries where gambling is illegal and showed gambling problems (Benegal, 2013).

Many researchers predicted that problem gambling by the adolescents would lead to adult problem gambling (Winters, 2002) and influenced more than normal rate of other problem behaviors and attitudes like smoking, alcohol and drug use (Stinchfield, 2000) and other related problem at school (Gupta & Derevensky, 1998).

The reasons for gambling are very complicated and unclear as each gambling has its different style and different way of play. The reasons for gambling also differs

from person to person and also from gambling to gambling. But the most common personal reasons for gambling were excitement, enjoyment, winning money, relieving depression, relaxation and skipping from problems (Wood, Gupta, Derevensky, & Griffiths, 2004).

Adolescent problem gambling risk factors were substance use, deviant peers, gambling history of family as well as careless attitude (Pietrzak, Ladd, & Petry, 2003). The factors also included family behavior such as socio-demographic, chemistry, attitudes, parental monitoring, relationship characteristics (McComb & Sabiston, 2010), antisocial, risk-taking and delinquent behavior (Ladouceur, Dubé, & Bujold, 1994). The risk factors also included government policy towards gambling as problem gamblers were usually seen in countries where gambling was illegal such as internet gambling problem in India (Benegal, 2013). Problem gambling issues were found among ethnic groups of adolescents living in other countries which might be influenced by cultural differences (Ellenbogen, Gupta, & Derevensky, 2007). So cultural differences impacted youth gambling problem (Campbell et al., 2012).

Delinquency and engagement in other addictive behavior among the adolescent were reported with clear risk factor for adolescent pathological gambling (Stinchfield, 2000). Research findings showed that among the problem gamblers, partners gambling rates was higher than general population. Dating violence correlated adolescent or youth gambling problem (Korman et al., 2008). The most important predictors of adolescent involvement in gambling were lesser rewards from school, antisocial and risk-taking behaviors (Jackson, Dowling, Thomas, Bond, & Patton, 2008). So this study discusses personal and environmental factors of

adolescent gambling, adolescent gambling behavior and adolescent gambling problem in the following conceptual framework.

Conceptual Framework

A conceptual framework is constructed using social cognition theory model (Bandura, 1986). In figure 2.1, there are personal and environmental factors of adolescent gambling behavior and adolescent gambling predicts adolescent gambling problem. To study the adolescent gambling, key factors are needed to be discussed thoroughly. Personal factors include excitement, money, depression, skipping from problem, boredom, socializing, gender, age, ethnic and minor group, religion and culture. Environmental factors include availability of gambling, accessible to gambling and its venues, government, acceptable gambling (Adams, 2008), family and friends, media, information and technology. The key factors are given in figure 2.1.

Conceptual Framework

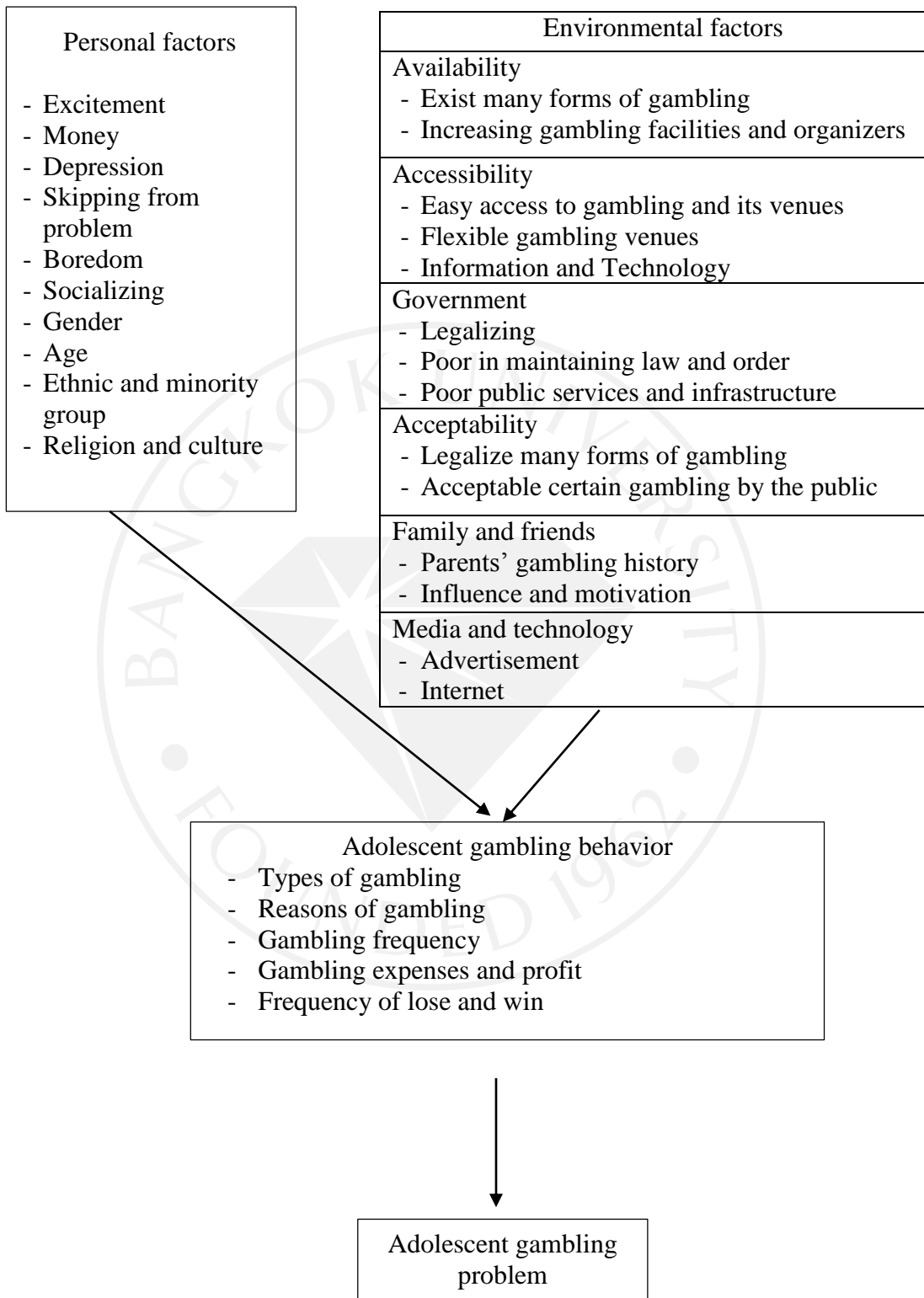


Figure 2.1: Conceptual Framework

Personal Factors

The common personal factors for gambling were excitement, enjoyment, winning money, relieving depression, relaxation and skipping from problems (Wood et al., 2004). Most youths gambled to kill their boredom in Imphal and they gambled mostly for fun and enjoyment in Imphal. Also there were very few adolescents who gambled for livelihood (Hueiyen, 2013). Personal factor also includes gender, age, ethnic group and religion.

Gender

Males liked gambling in sports betting and games of skills while females like gambling of chance or luck like scratch cards, lottery and bingo (Adebayo, 1998). In developed countries, male adolescents gambled more in card games, racing and sports events whereas female adolescents gambled more in bingo and scratch tickets (Delfabbro, Lahn, & Grabosky, 2005).

Male adolescents gamble with bigger bets than the adolescent female do. Male gamblers had genetic factor that influenced the adolescent to gamble whereas female gamblers were influence by parents and friends; Female gamblers were encouraged by game of group (Hardoon & Derevensky, 2002).

Schools boys gambled more frequently (Stinchfield, 2000) and male adolescents gambled more likely than female adolescents (Griffiths & Barnes, 2008). Researchers showed that in an overall consensus, male adolescents gambled more often than females did (Ladouceur et al., 1994).

Male problem gamblers rates were twice those of the female adolescents (Hardoon & Derevensky, 2002). In United Kingdom, male internet gamblers were

found to be more problematic than female gamblers. Boys were reported to be more associated with problem gambling than the girls (Griffiths & Barnes, 2008). Also male gamblers were found more problematic in families where parents also gambled and misused drugs (Gerdner & Svensson, 2003). So male adolescents preferred game of skills while female adolescents liked game of luck. Male adolescents gambled more often than female adolescent did and number of male problem gamblers are more than the number of female gamblers.

Ethnic Group and Culture

Researchers have started studying the relationship and variability of culture and ethnic group on gambling, problem gambling and adolescent gambling (Stinchfield, 2000). Problem gambling issues were found among the ethnic group which was associated with acculturation difficulties (Ellenbogen et al., 2007). Recent study in the year 2011 reported that number of cultural differences existed and this cultural differences impacted youth gambling problems (Campbell et al., 2012). And this clearly shows that problem gamblers are found in different ethnic group such as immigrants or tribal, who belong to different culture.

Another factor of adolescent gambling and adolescent gambling problem was ethnic minorities (Zangeneh, Mann, McCready, & Oseni, 2010). A Canadian study on adolescent gambling among the various ethnic minorities i.e. Portuguese, Tamil and Polish, reported that Portuguese and Tamil youths gambled more than Polish youths (Robert, Mann, & Zangeneh, 2004). Portuguese and Tamil adolescent saw gambling as socially acceptable whereas Polish youths did not. And researchers reported that

younger youths of ethnic groups favored gambling more than the older youths (Campbell et al., 2012).

Manipur consist of more than 30 ethnic groups. The main ethnic groups are Meitei, Kuki, Naga and Pangal. They live in peace and harmony for many centuries (Manipur, 2014). The Manipuri follow many faiths and religions which can be even traced to its history. Hinduism is the official state religion and 46.01% of the total population in Manipur is Hindus. Sanamahism is an ancient indigenous religion which is very similar to Hinduism. Christianity was brought in by Christian missionaries in Manipur and about 34.04% of the population in Manipur is Christians. Muslims or Islam are about 8.81% in Manipur. And other religions are about 10.86% in Manipur.

Most of the Meiteis follow Sanamahism, Pangals follow Muslim or Islam, Naga and Kuki follow Christian religion. A mixture of various ethnic groups follow other religions in Imphal, Manipur (India, 2012). So these different ethnic and minority groups and together with too many different religions may associate with adolescents gambling behavior in Imphal.

Environmental Factors

The environmental factors include family and friends, media and technology, internet, availability of gambling, accessibility to gambling, government, acceptability, family and friends, media and technology. The factors are discussed below.

Availability

The most common type of gambling among adolescents were lottery and scratch tickets which are legalized in USA (Jacobs, 2000) and in Canada (Felsher,

Derevensky, & Gupta, 2003) respectively. The most common form of gambling among adolescents in United Kingdom is fruit machine i.e. slot machine (Fisher, 1993) and internet gambling is popular in Greece (Tsitsika et al., 2009). British adolescents gambled lottery though there was no hope of winning huge money (Griffiths & Wood, 2002). In Scotland, gambling with fruit machine was still very common (Moodie & Finnigan, 2006). There is no slot machine or fruit machine or any gambling machine in Manipur and so the people gamble mostly local forms of gambling. Playing cards, lucky draws, bingo, lottery and board games were gambled and associated mostly among the families and friends (Giroux, Jacques, Ladouceur, Leclerc, & Brochu, 2012) which is very similar to gambling behavior in Imphal. In Manipur, the common forms of gambling are housie bumper draw (bingo), lottery, card games, lucky draw, ludu and lagau (dice), internet gambling and other dice tricks. Housie bumper draw and lottery seem most common in Manipur (Hueiyen, 2013). There are many local gambling in Imphal. Playing card is very common form of gambling for many people especially for boys in Manipur as there are many different kinds of games that can be played of playing cards. Some of the games of playing cards in Manipur include rummy, duri point, dusphabi, nagaland point, flash etc.

Rummy Game

With one set of cards, 4 persons can play a rummy game. Normally 5-7 persons play the game with 2 sets of cards. Each player is dealt with 13 cards. A joker card for each game is chosen by the person who sits next to the one who deals the card. In this game, the first thing every player would look for is an original sequence

of three cards of the same color (no joker card). Once player has the sequence cards, the player can make trains of 3-4 cards of the same numbers but with different colors. All players will pick one card on rotation from the set until one of the players got at least one sequence and trains of all the 13 cards. A player may keep the card or throw if player doesn't need it. The next player who sits next to one has the choice to either pick the card player have thrown or pick one from the set. This rotation is continued until the covered card is all over. Once the entire set is opened, they are reshuffled and put back face down to pick up and continue the game. If someone finishes the game, the point is counted on the basis of those cards that was not into a sequence or train in player's hand. If any player does not have anyone original sequence yet, even the trains will be counted to the player's point. The lesser cards with lesser number player hold the safer the player is in the game. Normally the winning number is 1000.

Duri point is the same as rummy but it is played with 7 cards. Nagaland point is played with 4-8 or more players where spade is the universal color or joker. The winner is the player who gets highest points.

Dusphabi is played with partners sitting opposite each other and limited to only 4 players. Dusphabi is played to catch the 10 among the four 10s. The winner team gets the highest number of ten.

Many youths are attracted to many form of gambling in Imphal and many youths are seen gambling in every part of the state (Hueiyen, 2013).

Accessibility

With the extensive holding of housie games in the name of charity, a large number of registered associations or unions have cropped up in various parts of

Manipur, particularly in Imphal city. And these local games are mostly held on numerous playgrounds, church campus, open field, club building etc. which are very easy for the adolescents to participate in gambling in Imphal (Hueiyen, 2013). The speed of gambling in internet increased among the school students (Wong, 2010). Internet gambling is increasing rapidly in countries where gambling is illegal and the government can't regulate internet gambling as it is easily accessible from anywhere and anytime (Sayta, 2010).

Acceptability

Gambling is legal in many countries. Many countries have started legalizing gambling and expanded gambling venues significantly over the past 20 years (Duhig, Maciejewski, Desai, Krishnan-Sarin, & Potenza, 2007). However gambling is still illegal in India except in two states i.e. Sikkim and Goa (Sayta, 2010). Even though gambling is illegal in India, there are many forms of gambling such as sports betting, lottery, dices, bingo and internet gambling are practicing in the Indian soil. Cricket match-fixing was also reported and many cricketers from Pakistan, Britain and Indian were booked for match-fixing in India where betting is illegal in India (Burns, 2011). In Manipur, housie bumper draw is a very noble tool for driving funds for philanthropic and charitable purposes. Local clubs, churches, district level or state level organizations conducted housie bumper draws to raise funds for particular purposes (Hueiyen, 2013). Public gambling are mostly held during the state and national festive seasons like Diwali, Yaoshang, Cheiraoba, Lui Ngai Ni, Christmas, New Year etc. in Imphal. There are also many other local festivals such as Ploughing festival, Harvesting festival, Ningol Chakouba, Chumpha, Cheiraoba, Kang etc. thus

giving a chance for the adolescents to gamble in the state (Osborne, 2012) during these festivals throughout the year. So the public accepted or allowed to gamble and motivate the youths to participate in such public gambling.

Government

The government of Manipur is indirectly responsible for illegal gambling in the state without restricting the gambling laws and order, and not taking up any measures to tackle the gambling issues in Imphal (Hueiyen, 2013). Due to the poor infrastructure of entertainment and recreational facilities and services, many youths in Manipur gamble to kill their boredom or to have fun and enjoy their lives. Besides irregular supply of electricity by the state triggers the boredom. Electricity availability in the Imphal has been limited to a few hours getting just a couple of hours a day. Load shedding is imposed at different time slots for different locations in the state and this is happening since decades (Albert, 2013). The adolescents have less privilege to access to entertainments such as public parks, games stations, gyms, mobile phones, internet, TV and other social media due to poor infrastructures and backwardness of the people (Haokip, 2012). So many youths depend on gambling as a mean of fun and enjoyment. There are many forms of illegal gambling in the state. These illegal gambling are unregulated, untaxed and most of them are very unclear. Government just ignored it in the sense that gambling is illegal (Srikanth & Mattamana, 2011) but it is important to legalize certain gambling in the country instead of opposing gambling (Benegal, 2013) where illegal gambling is increasing. So government of Manipur can either restrict gambling in the state or legalize certain gambling in the state to generate revenues for the state.

Family and Friends

Recent studies showed that the common environmental factors of adolescent gambling were family (McComb & Sabiston, 2010) and friends (Giroux et al., 2012). Researchers reported that parents were role models for any gambling and parental gambling predicted adolescent gambling (Arcuri, 1985). Adolescents were found gambling which was influenced by their parents gambling (Hardoon, Gupta, & Derevensky, 2004). So parental monitoring plays an important factor in predicting adolescent gambling. Researchers reported that higher parental monitoring showed lesser participation in gambling among male adolescents (Barnes, Welte, Hoffman, & Dintcheff, 2002) and lower parenting increased adolescent gambling and adolescent pathological gambling (Wanner, Vitaro, Carbonneau, & Tremblay, 2009). Problem gamblers among the adolescents and adolescent gambling disorder were from a family with lower maternal and paternal care (Grant & Suck, 2002). Among the problematic gamblers, non-gamblers and social gamblers, problematic gamblers were found from higher childhood mistreatment (Felsher et al., 2003). Adolescents participating in gambling were not considered as serious issue for the fathers of teenagers whereas mothers considered as a serious issue (Shead, Walsh, Taylor, Derevensky, & Gupta, 2011). Students gambled with their family i.e. with their parents, brother or sister at their own residence. Besides some parents of about 84% agreed to buy lottery tickets for their children (Gupta & Derevensky, 1998). Parent's drug abuse predicted problem behavior among the male adolescents (Gerdner & Svensson, 2003). Those adolescents who were taught to be responsible in life by their parents were reported to have little interest in gambling (Delfabbro & Thrupp, 2003). Parental monitoring and educating their children would stop their children from

gambling. Researcher suggested parents for greater parental awareness as preventive measure for the adolescent gambling (Campbell et al., 2012). So parents play very important role model towards adolescent gambling and parental monitoring impact their children gambling behavior.

Game of luck or chance such as lottery, draws, board games and bingo were often gambled with families and friends (Giroux et al., 2012). Housie bumper draw and lottery are often played with families and friends in Imphal. Card games are common among the male adolescents and mostly they play card games with friends.

Media and Technology

Media is an environmental factor of adolescent gambling (McComb & Sabiston, 2010). Media influences the adolescent attitudes and behavior. Exposure in media influences adolescent behavior and attitudes towards gambling positively or negatively. Researcher showed that advertisement was related with gambling behavior and pathological gambling (Gavriel, Teichman, & Rahav, 2010). Due to the increased advertising of gambling in all kinds of media, access to gambling has rapidly increased over the past twenty years (Duhig et al., 2007). New technologies such as mobile phones, tablets and other electronic devices create opportunities for adolescents to gamble. At times the newspaper was flooded with gambling advertisement in Imphal (Hueiyen, 2013) and that motivated the youths to gamble in the state. New technology in gambling industries also influences the gamblers. Such technology make easily accessible and attractive for the young people. So media and technology increases adolescent gambling activities in Imphal, Manipur.

Internet

Another environmental factor of adolescent gambling is the internet. New challenges and problem gambling are presented among the adolescent gambling with the internet. Adolescent problem internet gambling were seen in many countries such as in Canada, United Kingdom, United States of America, Greece, Australia etc. Researcher showed that problem gamblers were reported more in internet gambling than non-internet gamblers. Internet gambling could become addictive easily than any other forms of gambling (Griffiths & Barnes, 2008). The speed of gambling in internet and problem gambling increased among the school students (Wong, 2010). Internet gambling is increasing rapidly in countries where gambling is illegal. Government do not regulate internet gambling as it is easily accessible from anywhere and anytime (Sayta, 2010). So problem gamblers are often found where internet gambling is illegal (Benegal, 2013) and the internet impacts adolescent gambling to a great extent.

Conceptual Framework for Adolescent Gambling in Imphal, Manipur

Conceptual framework for adolescent gambling in Imphal, Manipur is shown in Figure 2.2.

Conceptual Framework for Adolescent Gambling in Imphal, Manipur

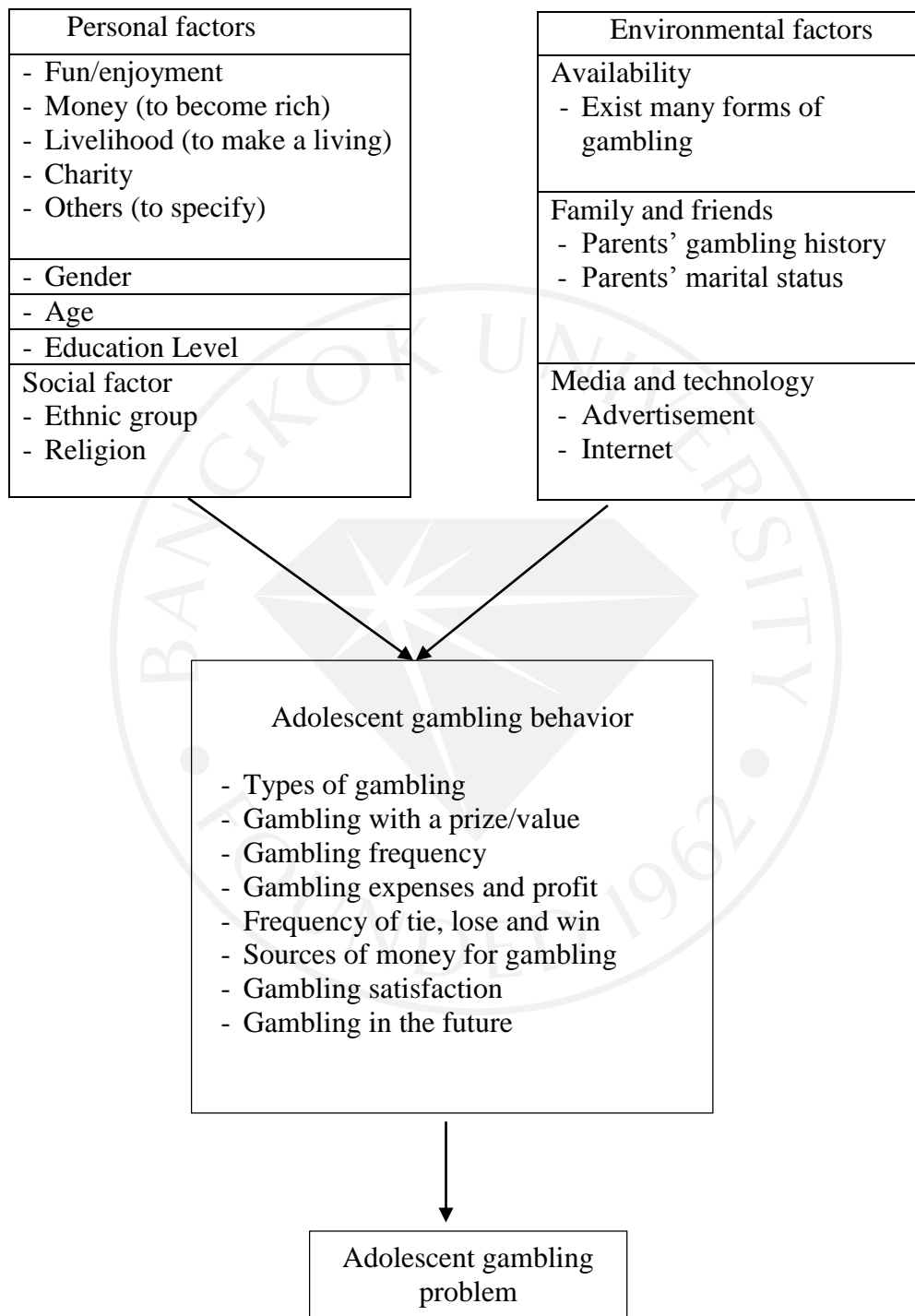


Figure 2.2: Conceptual Framework for Adolescent Gambling in Imphal, Manipur.

This study will examine the following factors in Figure 2.2. There are personal and environmental factors of adolescent gambling behavior. The personal factors include fun/enjoyment, money, livelihood, charity and others, gender, age and social factor (ethnic group and religion). The environmental factors include availability of local gambling, families and friends, and media and technology. The other factors i.e. government, accessibility and acceptability are excluded in the study of adolescent gambling in Imphal, Manipur to limit the scope of this study as it is going to be too broad and complicated and someone else need to study the gambling behavior and with the excluded factors in the future in details.

The personal and environmental factors, and adolescent behavior will be analyzed, and study using multiple regression with dependent factor as adolescent gambling behavior and independent factor as the two factors (personal and environmental) and study the adolescent gambling behavior in Imphal, Manipur (India). And the adolescent gambling behavior will predict the adolescent gambling problem in Imphal, Manipur however relationship between the personal factors and environment factors is not studied to limit the scope of study on adolescent gambling in Imphal.

CHAPTER 3

METHODOLOGY

Participants

Researcher used GPower (Erdfelder, Faul & Buchner, 1996) program to analyze sample size. GPower predicted a sample of 148 (with effect size = .15, power = .99 and two predictors) however the study used sample size of 384 (Krejcie and Morgan, 1970) to represent population better. Researcher received 386 questionnaires in total and 2 incomplete questionnaires were omitted. So totally 384 questionnaires were used for the further analysis by the researcher. This study included 384 adolescents. About fifty percent of the participants (193) were males and about fifty percent (191) were females. The participants were from grade 7-8 (n = 32 or 8.3%), 9-10 (n = 237 or 61.7%) and 11-12 (n= 115 or 29.9%), with an age range of 11 years to 21 years. These grades were selected in order to identify development differences, and they represented the entire age range of high school students in Imphal, Manipur. Approval was obtained from principals of 8 schools in Imphal. These schools were chosen due to their proximity to the city of Imphal and included not only the city core but also the two districts in the east and west of Imphal city. The schools sampled were representative of middle class communities in Imphal, Manipur. Adolescents in these schools belonged to Meeitei (60.2%), Naga (22.8%), Kuki (1.8%), Pangal (0.5%) and others ethnic groups (14.7%). Their faith included Hinduism (67.2%), Christian (29.9), Muslim (0.3%) and others religions (2.6%). Table 3.1 shows the details of the students' demographic characteristics.

Table 3.1 : Demographic Characteristics of the Sample (N = 384)

Participant Characteristics	Number	Percentage
Gender: Male	193	50.3
Female	191	49.7
Age: 11 years	7	1.8
12 years	11	2.9
13 years	15	3.9
14 years	131	34.1
15 years	90	23.4
16 years	15	3.9
17 years	36	9.4
18 years	30	7.8
19 years	26	6.8
20 years	17	4.4
21 years	6	1.6
Class: 7-8	32	8.3
9-10	237	61.7
11-12	115	29.9
Ethnic group: Meitei	230	60.2
Naga	87	22.8
Kuki	7	1.8
Pangal	2	.5
Others	56	14.7
Religion: Hinduism	258	67.2
Christianity	115	29.9
Muslim (Islam)	1	.3
Others	10	2.6

Note. Data on gender, age, class, ethnic group and religion were collected categorically.

Research Instruments

The researcher used a survey to carry out the investigation using structured questionnaires written in English. As Manipur's official language was Meiteilon and English (Department of Information Technology, 2014) translation was not needed. The questionnaire contained a total of 26 questions and was divided into two parts: questions 1 to 20 on gambling behavior and questions 21 to 26 on personal data.

Personal Factors. Items number 10 and 21 to 25 were personal factors to predict the adolescent gambling behavior in Imphal. Item number 10 was the personal reason for gambling in Imphal. Item 21 to 25 were personal characteristics such as gender, age, education level, ethnic group and religion respectively.

The participants were asked to indicate their personal data including gender in item 21 (male or female), age in item 22, education level in item 23 (class 7-8, 9-10 and 11-12). The questionnaire were modified from a previous study on adolescent gambling behavior, attitudes, and gambling problem (Turner, Macdonald, Bartoshuk, & Zangeneh, 2007). Item 24 and 25 was based on a previous study in Imphal on drug use (Kermode et al., 2007). Ethnic group was item 24 (answers; Meetei, Pangal, Naga, Kuki and others) and religion was item 25 (answers; Hinduism, Christianity, Muslim and others). Income was excluded as adolescent gambled using allowances from their parents.

Environmental Factors. Items number 1, 9, 20, and 26 were environmental factors of the adolescent gambling behavior in Imphal. Item number 1 inquired of the availability of the types of gambling in Imphal, Manipur. Item number 9 inquired the sources of the participants' knowledge about the gambling. Item number 20 and 26 assessed their parents' gambling frequency and marital status respectively. Their

parent's data included only marital status in item 26 (answers; married, divorced, widowed/widower). Their parents' occupation type and parent's income were not included as the pre-test revealed that adolescents were unaware of their parent's occupation and income.

Gambling Behavior. Item numbers 1, 2 to 8, 11, 12 and 14 assessed the gambling behavior. The item 1 asked whether the participants had participated in gambling in past years and two; the answers "yes" or "no" were provided. If they had participated gambling in past year then the participants could select from the list of gambling i.e. playing cards, housie bumper draw, lottery, lucky draw, sports betting, lagau, ludu, internet gambling and others too if any to specify. And if the participants had not participated in gambling in last year then they had to go to question number 14 to answer to what extent they agreed or disagreed to the ban of any form of gambling in Manipur (answers; strongly disagree, disagree, undecided, agree and strongly agree).

Item 2 inquired the participants' gambling frequency (Once in a year, a few times in a year, once a month, a few times a month, once a week and every day). Item 4 asked the participants' expenses on gambling (with answers; Rs. 100, Rs. 101-500, Rs. 501-1,000, Rs. 1,001-1,500, Rs. 1,501-2,000, Rs. 2,001-2,500, Rs. 2,501-Rs. 3000, Rs. 3,001-3,500, Rs. 3,501-4,000, Rs. 4,001-4,500, Rs. 4,501-5,000 and Rs. 5,001 and above). Item 3 asked the participants whether they had gambled for a price or value (with the responses yes or no) as some game had no prize or value in Imphal. Item 5 inquired the participants' sources of money to gamble (with the answers; parents, borrowed from someone, stolen and income). Item 6 inquired the participants whether they won or lost (with answers; yes, no and draw). Item 7 assessed the

participants' expenses or profit from gambling (with answers; Rs. 100, Rs. 101-500, Rs. 501-1,000, Rs. 1,001-1,500, Rs. 1,501-2,000, Rs. 2,001-2,500, Rs. 2,501-Rs. 3000, Rs. 3,001-3,500, Rs. 3,501-4,000, Rs. 4,001-4,500, Rs. 4,501-5,000 and Rs. 5,001 and above). Item 8 asked the participants whether they played with their friends, families and relative, strangers and organizers. Item 11 inquired the participants' gambling satisfaction (answers; very unsatisfied, unsatisfied, somewhat unsatisfied, neither satisfied nor unsatisfied, somewhat satisfied, satisfied and very satisfied) and item 12 asked the participants' likelihood to gamble again (answers; very unlikely, unlikely, somewhat unlikely, neither likely nor unlikely, somewhat likely, likely and very likely).

Gambling Problem. Item number 13 was used to study adolescent gambling problem. DSM-IV J was found to be the most suitable measure of adolescent problem gambling (Gupta, Derevensky, & Marget, 2004). DSM-IV-J was a revised version of the DSM-IV which was designed to assess adult problem gambling. DSM-IV-J was created or revised for children and adult. DSM-IV-J had twelve questions with yes or no answer format which was pretty close to adult's format. The DSM-IV-J consisted of nine dimensions of pathological gambling: progression and preoccupation, tolerance, withdrawal and loss of control, escape, chasing, lies and deception, illegal acts, family and academic disruptions and financial bailout. So this revised version DSM-IV-J served as the most effective discriminator of pathological gambling in children as well as adolescents. Researchers also suggested the use of DSM-IV as the scale was applicable in measuring problem gambling such as lottery or other gambling in other countries. The 12 items of DSM-IV J were; whether the participants think about gambling all the time, spend more and more money on gambling, become

tense, restless, when trying to cut down, gamble as a way of escaping from problems, chase losses, lie to family and friends about gambling, use other money for gambling, stolen money from outside family behavior, skip school more than 5 times to gamble in past year and sought help for serious money worry caused by gambling.

Data Collection Procedure

A structured questionnaire was pre-tested to improve and to avoid any errors in the study. Pretest was conducted with 20 different individuals in Imphal with some help from researcher's friends and experts. Copies of the questionnaire were given to Manipuri colleagues from Manipur. It took about 20 to 25 minutes to complete the questionnaires. Both positive and negative feedbacks were received from the participants. Some questions were not answered. Few questions were adjusted such as in items 1, 3, 6, 20 and 23. Few unnecessary questions such as parents' income, parents' occupation type and participant's drug use were removed on the basis of the feedbacks and comments received from the participants as well as from the advisor.

Since consent could not be obtained from parents, approval was requested from the principals of the participating schools. A total number of 400 questionnaires were sent out for the survey with a cover letter describing the purpose of the study. All students who were willing to participate were included in the study. Participants were given the questionnaire during regular class to assess their recent gambling history, frequency of gambling behavior, types of gambling activities in which they engaged, and amounts of money wagered. Students were assured of confidentiality and were required to complete the questionnaire individually. Teachers were present along with research assistants during the administration of the questionnaire. Research

assistants were present at all times to supervise the data collection process and answer questions. It took students approximately 25 minutes to complete the questionnaire.

The completed survey questionnaires were sent back to Bangkok by post for analysis using the research tools and instruments.



CHAPTER 4

RESULTS

Of the total sample of 384, 42.2% (162) of participants reported having gambled during the past 12 months in Imphal, Manipur. There were both personal and environmental factors of adolescent gambling behavior. The adolescent gambling behavior predicted adolescent gambling problem. The personal and environmental factors of adolescent gambling behavior and gambling problems in Imphal, Manipur are reported below.

Personal Factors

Most adolescents in Imphal, Manipur reported to have gambled for fun and enjoyment. Previous studies in other countries such as in Denmark showed that most adolescents gambled for money (Kristiansen & Jensen, 2014). The most endorsed reason for engaging in gambling behavior during the past year were for the purpose of enjoyment (79.5%) followed by the desire to make money (61.9%) in Canada (Gupta & Derevensky, 1998). However 90% of the respondents in Imphal, Manipur who played a game with a prize reported to have gambled for fun and enjoyment. Other reasons for adolescents gambling included livelihood (gambling for money) and charity. The percentage of gambling for money or livelihood in Imphal, Manipur was very low (3%) as compared to Canada (61.9%). The other personal factors related to adolescents gambling in Imphal, Manipur were gender, age, education level, ethnic group and religion.

Gender. Table 4.1 tabulates the male and female participation in different types of gambling activities in Imphal, Manipur.

Table 4.1 : Respondents Cross Tabulation of Gender and Types of Gambling (n=162)

	Responder's gender		Total N= 162
	Male N=106	Female N= 56	
Playing cards	8.64%	0%	8.6%
Housie bumper draw	14.81%	8.02%	22.8%
Lottery	1.85%	3.02%	4.9%
Lucky draw	3.08%	2.46%	5.5%
Sports betting	20.98%	2.46%	23.5%
Lagau	1.85%	1.85%	3.7%
Ludu	6.79%	15.43%	22.2%
Internet gambling	7.40%	1.23%	8.6%
Total	65.43%	34.56%	100%

More males (65.43%) in Imphal, Manipur reported to have gambled than females (34.56%). The three most popular gambling activities amongst male adolescents were sports betting (20.98%), housie bumper draw (14.81%) and cards (8.64%) respectively. Internet gambling (7.40%) and ludu (6.79%) were also popular for male adolescents in Imphal, Manipur. For females, the most popular gambling activities were ludu (15.43%), housie bumper draw (8.02%) and lottery (3.08%) respectively. Lucky draw and sports betting were also popular (2.46% for both) for female adolescents in Imphal, Manipur.

Housie Bumper Draw and ludu were the most preferred gambling activities by both males and females, although a greater percentage of males (14.81%) played Housie Bumper Draw than females (8.02%). A greater percentage of females (15.43%) played ludu than males (7.40%). Gender differences regarding gambling activities were as follows: 20.98% of males and 2.46% of females betted on sports, 7.40% of males and 1.26% of females played internet gambling ($\chi^2 (162) = 24.891, p$

< 0.001), and 1.8% of males and 3% of females played lottery. Male adolescents gambled in games of skills such as playing cards, sports betting and internet gambling whereas female adolescents were less attracted to such games. Female adolescents gambled in games of luck such as lottery and ludu whereas male adolescents were less attracted to such games. Previous researchers showed that male adolescents preferred games of skills and female adolescents preferred games of luck (Adebayo, 1998). In developed countries, males gambled more in card games and sports betting whereas the females gambled more in bingo and scratch tickets (Delfabbro, Lahn, & Grabosky, 2005). Also male adolescents in Imphal, Manipur played more in sports betting, card games and internet games whereas female adolescents played more in ludu, Housie Bumper draw and lottery.

Previous studies in other countries showed that male adolescents gambled more often (Griffiths & Barnes, 2008) than did female adolescents (Ladouceur, Dubé, & Bujold, 1994). Table 4.2 compares the frequency of male and female participation on the gambling activities in Imphal, Manipur.

Table 4.2 : Cross Tabulation of Respondents Gender and Frequency of Gambling in a Year (n=162)

	Responder's gender		Total
	Male	Female	
Once a year	16.04%	11.72%	27.7%
A few times a year	19.13%	16.04%	35.1%
Once a month	2.46%	0.61%	3%
A few times a month	7.40%	4.32%	11.7%
Once a week	6.79%	0%	6.7%
A few times a week	9.25%	0.61%	9.8%
Everyday	4.32%	1.23%	5.5%
Total	65.44%	34.56%	100%

More males reported engaging in most gambling activities more frequently than females in Imphal, Manipur ($\chi^2(162) = 16.843, p = .010$). Of the total gamblers (n=162), 16.04% of male gamblers played once a year and 11.72% of female gamblers played once a year. Male adolescents (19.13%) played a few times a year and 16.04% of females played a few times a year. Male adolescents (9.25%) gambled a few times a week and only 0.61% of females gambled a few times a week. And 6.79% of males gambled once a week whereas none were reported for females having gambled weekly in Imphal, Manipur.

Age. Table 4.3 tabulates the respondents' age and gambling participation in Imphal, Manipur.

Table 4.3 : Cross Tabulation of Respondents' Age and Gambling Participation of Sample (n=384)

Responder's age	Gambled in the past year?		Total
	Yes	No	
11	0	7	7
12	0	11	11
13	4	11	15
14	37	94	131
15	28	62	90
16	12	3	15
17	25	11	36
18	21	9	30
19	16	10	26
20	14	3	17
21	5	1	6
Total	162	222	384

There was a significant relationship between age and adolescents gambling participation in Imphal ($\chi^2(384) = 78.262, p < 0.001$). Adolescents started gambling at the age of 13 in Imphal, Manipur. The respondents' age were from 13 to 21 years

old. In Imphal, adolescents with the age of 14 years old were found highest (n=37) participation in gambling followed by adolescents with the age of 15 years old (n=28).

Education Level. Table 4.4 compares the frequency of gambling activities by respondents of various education levels in Imphal, Manipur.

Table 4.4 : Cross Tabulation of Education Level and Frequency of Gambling (n=162)

	Responder's highest education level		Total
	class 9-10	class 11-12	
Playing cards	3%	5.5%	8.6%
Housie bumper draw	18.5%	4.3%	22.8%
Lottery	1.8%	3%	4.9%
Lucky draw	0.6%	4.9%	5.5%
Sports betting	10.4%	12.9%	23.4%
Lagau	1.2%	2.4%	3.7%
Ludu	9.2%	12.9%	22.2%
Internet gambling	4.9%	3.7%	8.6%
Total	50%	50%	100%

There was an association between respondents' education level and adolescents gambling behavior ($\chi^2(384) = 67.209, p < 0.001$). Adolescents in grade 5 started gambling in other countries (Turner, Macdonald, Bartoshuk, & Zangeneh, 2007) whereas adolescents in Imphal, Manipur started gambling when they were grade 9-10. Adolescents in grade 7-8 did not gamble. Half of respondents (50%) were studying in class 9-10 and the other half (50%) were studying in class 11-12. The three most popular gambling activities amongst grade 9-10 adolescents were Housie Bumper Draw (18.5%), sports betting (10.4%) and ludu (9.2%) respectively. For grade 11-12 adolescents, the three most popular gambling activities were ludu (12.9%), sports betting (12.9%) and playing cards (5.5%) respectively. Sports betting was found to be the most popular game amongst both the grade 9-10 (10.4%) and 11-12 (12.9%) students. Gambling participation increased with education level in other

countries (Turner et al., 2007); similar tendency could not be detected among students in Imphal, Manipur.

Ethnic group. Table 4.5 compares the percentage of gambling activities by respondents of various ethnic groups in Imphal, Manipur.

Table 4.5 : Cross Tabulation of Respondents' Ethnic Group and Types of Game (n=161)

Types of game	Responder's ethnic group				Total
	Meetei	Naga	Kuki	Others	
Playing cards	2.5%	5.0%	0.6%	0.6%	8.7%
Housie bumper draw	17.4%	2.5%		2.5%	22.4%
Lottery	2.5%	2.5%			5.0%
Lucky draw	1.2%	3.1%		1.2%	5.6%
Sports betting	9.9%	9.9%		3.7%	23.6%
Lagau	3.1%		0.6%		3.7%
Ludu	6.8%	9.3%		6.2%	22.4%
Internet gambling	2.5%	2.5%	1.9%	1.9%	8.7%
Total	46.0%	34.8%	3.1%	16.1%	100%

There was an association between respondents' ethnic group and adolescents gambling behavior in Imphal, Manipur ($\chi^2(384) = 31.339, p = < 0.001$). Forty five percent of the respondents were Meetei and 34.8% of the respondents were Nagas. Housie Bumper Draws (17.4%), sports betting (9.9%) and ludu (6.8%) were the three most common games amongst Meetei ethnic group. For Nagas ethnic group, sports betting (9.9%), ludu (9.3%) and card games (5%) were mostly played games in Imphal, Manipur. Nagas gambles more often than the Meeteis ($\chi^2(161) = 31.339, p = 0.01$). Previous researchers in other countries showed that adolescents gambling behavior, different culture and ethnic groups were correlated (Stinchfield, 2000).

Religion. Table 4.6 compares the frequency of gambling activities by respondents of various religions in Imphal, Manipur.

Table 4.6 : Cross Tabulation of Respondents' Religion and Types of Game (n=161)

Types of game	Responder's religion			Total
	Hindus	Christians	Others	
Playing cards	3.1%	5.6%		8.6%
Housie bumper draw	19.1%	2.5%	1.2%	22.8%
Lottery	2.5%	2.5%		4.9%
Lucky draw	1.2%	4.3%		5.6%
Sports betting	9.3%	12.3%	1.9%	23.5%
Lagau	3.1%	0.6%		3.7%
Ludu	9.3%	11.7%	1.2%	22.2%
Internet gambling	3.1%	5.6%		8.6%
Total	50.6%	45.1%	4.3%	100.0%

There was significant relationship between respondents' religion and adolescents gambling behavior ($\chi^2(384) = 36.726, p < 0.001$). Half of the respondents (50.6%) were Hindus and 45.1% of the respondents were Christians. Like the ethnic group, Hindu respondents played mostly Housie Bumper Draw (19.1%), sports betting (9.3%) and ludu (9.3%). Christian respondents played mostly sports betting (12.3%), ludu (11.7%), internet games (5.6%) and card games (5.6%). And Christian respondents played more often than the Hindu respondents did ($\chi^2(162) = 26.216, p = 0.01$).

Environmental Factors

The environmental factors of adolescents gambling behavior in Imphal, Manipur included availability of games, family, friends, media and technology.

Types of games. Table 4.7 shows the frequency of games gambled in Imphal, Manipur.

Table 4.7 : Frequency of Games Gambled in Imphal, Manipur (n=162)

	Frequency	Percent
Playing cards	14	8.6
Housie bumper draw	37	22.8
Lottery	8	4.9
Lucky draw	9	5.6
Sports betting	38	23.5
Lagau	6	3.7
Ludu	36	22.2
Internet gambling	14	8.6
Total	162	100.0

There were many types of games available in Imphal, Manipur. Most of the games were local games. The three most games played were respectively sports betting (23.5%), housie bumper draw (22.8%) and ludu (22.2%). The other games included playing cards (8.6%), internet gambling (8.6%), lucky draw (5.6%), lottery (4.9%) and lagau (3.7%). Housie bumper draw or bingo game was one of the most common games in other countries such as in Canada (Turner et al., 2007) and USA (Welte, Barnes, Wiczorek, Tidwell, & Parker, 2002). Cards and lottery games were very common in Canada and US while cards and lottery games were not common in Imphal, Manipur. Gambling machines, slot machines, scratch tickets, dominoes, pull tabs, proline and casino were reported in other countries such as in US, Canada, Australia, Macau, UK, Scotland etc. Such games were not common in Imphal, Manipur. Fruit machine or slot machine was reported in UK (Fisher, 1993) and in Scotland (Moodie & Finnigan, 2006). These games were not available in Imphal, Manipur. The adolescents gambled mostly the local games.

Family. There was significant relationship between respondents' parents gambling frequency and adolescents gambling behavior in Imphal, Manipur ($\chi^2(384) = 27.977, p < 0.001$). Respondents' parents' marital status and respondents gambling behavior was not related or significant ($\chi^2(384) = .228, p = 0.892$). In other countries, families and parents' gambling frequencies predicted adolescent gambling behavior (McComb & Sabiston, 2010). Adolescents were found gambling which was influenced by their parents' gambling (Hardoon, Gupta, & Derevensky, 2004) in other countries. From the total respondents (162), 83.3 % of the respondents' parents did not gamble and only 8% responder's parents gambled a few times a year in Imphal, Manipur.

Friends. The main environmental factor for adolescents gambling in Imphal, Manipur was friends. From the total gamblers (100), 77% of the gamblers played with their friends and 83% of the gamblers learned about the game they played from their friends. So friends influenced and associated with adolescents gambling behavior in Imphal, Manipur.

Media and Technology. The environmental factors for adolescents gambling in Imphal, Manipur also included organizers and advertisements. In other countries, 96% of the youths learned about the knowledge of the game from advertisement on Television (Derevensky, Sklar, Gupta, & Messerlian, 2010). However only 6% of the youths in Imphal, Manipur learned about the knowledge of the game from advertisement. The lower percentage of learning about the games from TV or advertisements is due to the backwardness of Imphal, Manipur. From those games the

adolescents played, 8.6% of the game was internet games. So media and technology influenced and motivated the adolescents to gamble in Imphal, Manipur.

Prediction of Gambling Behavior

Binary regression used independent variables to predict dependent variable. Independent variables were parent's gambling frequency, gender, age, education level, ethnic group, religion and parent's marital status. Dependent variable was the participation of gambling or the absence thereof. Table 4.8 shows independent factors predicting adolescent gambling participation in Imphal, Manipur and significance level for each coefficient in the binary regression model.

Table 4.8 : Independent Factors Predicting Adolescent Gambling Participation in Imphal (n=384)

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a						
Parents' gambling frequency	-.156	.109	2.026	1	.155	.856
Gender	1.156	.248	21.780	1	.000	3.178
Age	-.101	.131	.596	1	.440	.904
Education level	-1.270	.506	6.295	1	.012	.281
Ethnic group	-.191	.091	4.387	1	.036	.826
Religion	-.064	.228	.078	1	.780	.938
Parents' marital status	.224	.295	.575	1	.448	1.251
Constant	3.480	1.212	8.239	1	.004	32.453

Note: IV: Parent's Gambling Frequency, Gender, Age, Education Level, Ethnic Group, Religion and Parent's Marital Status.

DV: Adolescents Gambling Participation

The Wald test ("Wald" column) is used to determine statistical significance for each of the independent variables. The statistical significance of the test is found in the "Sig." column. From these results we can see that respondents' gender ($p < 0.001$), education level ($p = .012$) and ethnic group ($p = .036$) added significantly to the model/prediction, but respondents' parents' gambling frequency ($p = .155$), age ($p = .440$), religion ($p = .780$) and parents' marital status ($p = .448$), did not add significantly to the model. The model explained 32.8% (Nagelkerke R^2) of the variance in gambling participation and correctly classified 70.7% of cases.

Adolescents Gambling Behavior

The most basic measure of gambling participation was whether or not the respondents gambled in the past year. This measure can be defined for all the gambling, for a category or for an individual type of gambling. Of the total sample of 384, 42.2% (162) of the participants reported having gambled during the past 12 months or the past year. The percentage of gambling participation in Imphal, Manipur was lower than other countries such as US which was as high as 80.2% (Gupta & Derevensky, 1998). The numbers of games the respondents played in the past year are shown in Table 4.9

Table 4.9 : The Numbers of Games the Respondents Played in a Year (n=162)

Numbers of games the respondents played	Frequency	Percent
1	111	68.5
2	20	12.3
3	17	10.5
4	9	5.6
5	3	1.9
6	1	.6
8	1	.6
Total	162	100.0

Sixty eight percent (111) played just one type of game while others played more than one type of games. About twelve percent (20) played two types of games in the past year and ten percent (17) played three types of games in the past year. About six percent (9) played four types of games in the past year.

Gambling Frequency. The adolescents' frequency of gambling in Imphal, Manipur is shown in Table 4.10.

Table 4.10 : Frequency of Gambling (n=162)

	Frequency	Percent
once a year	45	27.8
a few times a year	57	35.2
once a month	5	3.1
a few times a month	19	11.7
once a week	11	6.8
a few times a week	16	9.9
everyday	9	5.6
Total	162	100.0

A third of participants (35.2%) reported to have gambled few times a year; 27.8% of the participants gambled once a year, 11.7% of the participants gambled few times a month and about ten percent of the participants gambled few times a week in Imphal, Manipur. As compared to other countries such as US, UK, Canada, Australia etc., the frequency of gambling in Imphal, Manipur was lower. For instance, 35.1% of responders in US (Gupta & Derevensky, 1998) played once a week whereas only 6.8% of the responders in Imphal, Manipur played once a week.

Gambling Expenses. Most of the responders played for prize but there were also respondents who did not play games for money or prize. About four tenths of respondents played games with no prize or value or money while the rest of the respondents (61.1%) played games for a prize or money. The gamblers who did not

gamble for a prize or money played games for fun and enjoyment. Out of total respondents (n=100) who played for a prize, 56% of the gamblers spent less than Rs.100, 27% of the gamblers spent Rs.101 to Rs.500 and 7% of the gamblers spent Rs.501 to Rs.1, 000 in Imphal, Manipur.

Gambling Profits. The percentage of winning a game was higher in Imphal, Manipur compared to other countries. In Imphal, Manipur, 38% of the gamblers (n=100) who played games for a prize and won the game they played in the past year and most gamblers (58%) lost the game they played in the past year. In Imphal, Manipur, 42.9% of the winners (n=42) won below Rs. 100, 26.2% of the winners won Rs. 100 to 500 and about twelve percent of the winners won Rs. 501 to Rs.1,000.

Gambling Satisfaction. Most of the respondents were satisfied gambling in Imphal, Manipur. In Imphal, 19% of the respondents (n=100) who played for a prize were very satisfied in the last game they played and thirty five percent were satisfied in the last game they played. However ten percent were very unsatisfied in the last game they played, thirteen percent were unsatisfied in the last game they played and eleven percent were somewhat satisfied in the last game they played. Gambling satisfaction could predict adolescents gambling problem in Imphal, Manipur.

Gambling in the Future. There was a high chance for the adolescents to gamble again in the future in Imphal, Manipur. From the total respondents (n=100) who gambled for a prize, 27% of the respondents were very likely to gamble again in the future and thirty five percent were likely to gamble again in the future. Ten percent were somewhat likely to gamble again in the future and ten percent were somewhat unlikely to gamble again in the future in Imphal, Manipur.

Adolescents Gambling Problem

Table 4.11 shows the percentage of participants having some problems and probable pathological in Imphal, Manipur.

Table 4.11 : DSM-IV-J's Reporting Gambling Problem (n=162)

DSM-IV-J Count	Frequency	Percent
0	150	92.6
1	5	3.1
2	1	.6
3	3	1.9
4	2	1.2
5	1	.6
Total	162	100.0

Note: No Problems = 0; Some Problems = 1-3; Probable Pathological = ≥ 4 .

DSM-IV-J count or scale categorized the participants; score 1 to 3 indicates participants having some gambling problems (at risk) and score 4 and above indicates participants having probable pathological gambling. The DSM-IV-J identified 5.6% (n=9) of the total respondents (n=162) as some problem gambling (at risk) and 1.8% (n=3) of the respondents as probable pathological. And the rest of the respondents (92.6%) did not have any gambling problem.

Table 4.12 compares the frequency of respondents' and DSM-IV-J's count in Imphal, Manipur.

Table 4.12 : Cross Tabulation of Responders' Gender and Frequency of Problem Gambling (n=12)

DSM-IV-J Scale	Responder's gender		Total
	male	female	
1.00	5	0	5
2.00	1	0	1
3.00	3	0	3
4.00	1	1	2
5.00	1	0	1
Total	11	1	12

Of the respondents (n=12) who had endorsed to DSM-IV-J item, eleven respondents were males and only one respondent was female. Two male adolescents were probable pathological and only one female adolescent was probable pathological in Imphal, Manipur. Similarly in other countries, male problem gamblers were twice those of the female adolescents (Hardoon & Derevensky, 2002). Two probable pathological respondents were Meeteis and belonged to Hinduism. And the other one was Naga, belonged to Christianity. Previous studies in other countries such as in Canada also showed that problem gambling issues were found among adolescents (Anglophone, Francophone and Allophone) in various ethnic groups (Ellenbogen, Gupta, & Derevensky, 2007).

The DSM-IV-J items (1-12) were analyzed and the percentage of affirmative responses endorsed to each question of the DSM-IV-J were shown in table 4.13

Table 4.13 : Percentage of Affirmative Responses Endorsed to Each Question of the DSM-IV-J

Question items on the DSM-IV-J	Gamblers (n= 12)
Think about gambling all the time.	33%
Spend more and more money on gambling.	33%
Become tense, restless, when trying to cut down.	33%
Gamble as a way of escaping from problems.	33%
Chase losses (gamble to get back the money you lost).	41.6%
Lie to family and friends about gambling behavior.	16.6%
Use other money (e.g. lunch money) for gambling.	25%
Take money from family to gamble without telling them.	0%
Steal money from outside family to gamble.	0%
Fall out with family because of gambling behavior.	0%
Skip school more than 5 times to gamble in past year.	8.3%
Seek help for serious money worry caused by gambling.	16.6%

The most frequently reported item endorsed for DSM-IV-J amongst the problem gamblers (n=12) was chasing loses (41.6%). The other most frequently reported items for DSM-IV-J were think about gambling all the time (33.3%), spend more and more money on gambling (33.3%), become tense, restless, when trying to cut down (33.3%) and gamble as a way of escaping from problems (33.3%).

The DSM-IV-J scale or count was used to analyze the type of gambling and the gambling frequency. Table 4.14 compares the types of games and DSM-IV-J count.

Table 4.14 : Type of Game and DSM-IV-J Cross Tabulation of Sample (n=12)

	Total count of DSM-IV-J					Total
	1.00	2.00	3.00	4.00	5.00	
Playing cards	0	0	1	0	0	1
Housie Bumper draw	0	0	0	1	1	2
Lottery	1	0	0	0	0	1
Lucky draw	0	0	1	0	0	1
Sports betting	4	1	1	1	0	7
Total	5	1	3	2	1	12

Note: No Problems = 0; Some Problems = 1-3; Probable Pathological = ≥ 4 .

Of the respondents who had endorsed DSM-IV-J items (12), seven respondents played sports betting in Imphal, Manipur. Six respondents (Some Problems = 1-3) played sports betting and had some gambling problem (gambling at risk) however one respondent (Probable Pathological = ≥ 4) played sports betting and had pathological gambling. Two respondents (Probable Pathological = ≥ 4) played Housie Bumper Draw and had pathological gambling. So the most problematic game reported in Imphal, Manipur was Housie Bumper Draw.

Table 4.15 compares the responders' gambling frequency and types of games in Imphal, Manipur.

Table 4.15 : Cross Tabulation of Responder's Frequency and Type of Gambling (n=12)

	Responder's frequency of gambling						Total
	once a year	a few times a year	once a month	a few times a month	once a week	a few times a week	
Playing cards	0	0	0	1	0	0	1
Housie Bumper Draw	1	1	0	0	0	0	2
Lottery	0	1	0	0	0	0	1
Lucky draw	0	0	1	0	0	0	1
Sports betting	0	1	1	0	1	4	7
Total	1	1	2	1	8	4	12

Of the respondents who had endorsed DSM-IV-J items (12), seven respondents played sports betting in Imphal, Manipur and two respondents played Housie Bumper draw. So sports betting and Housie Bumper Draw were the two most frequently played games by the respondents who had endorsed DSM-IV-J items.

CHAPTER 5

DISCUSSION

This study aimed to examine the prevalence of gambling participation, gambling factors and gambling behavior of seventh to twelfth grade adolescents in Imphal, Manipur (India).

Gambling Participation

The study found that 42.2% of the ninth to twelfth grade students had gambled in some form over the past year. Seventh and eighth grade students did not gamble. This study could not explain why the younger adolescents (7&8 grade) did not gamble. The younger adolescents (below grade 7) should be also included in the study in the future as fifth grade adolescents gambled in other countries (Turner, Macdonald, Bartoshuk, & Zangeneh, 2007). The respondents played more than one type of game. And the one year incidence of gambling participation amongst this sample (n=384) in Imphal adolescents was lower than previously reported (80.2%) in studies conducted overseas (Gupta & Derevensky, 1998).

In this study, the most popular gambling activities were sports betting, Housie Bumper Draw (Bingo) and ludu (dice). Lottery game was not common unlike the previous report (Hueiyen, 2013) in Imphal, Manipur. The other least commonly engaged forms of gambling were lagau, lucky draw and internet games. These findings were different from those reported in previous studies in other countries. Lottery (Jacobs, 2000) (Felsher, Derevensky, & Gupta, 2003), scratch tickets, (Jacobs, 2000) (Felsher et al., 2003) fruit machine (Fisher, 1993) and internet games (Tsitsika

et al., 2009) were popular in other countries whereas these games were not popular in Imphal, Manipur. This study could not confirm the availability of more games in the state. Although gambling is illegal in Manipur, some forms of games are accepted by public; however it is not clear from the findings of this study whether the gambling activities were conducted in public venues or in private settings.

The gambling participation data analyzed in this study confirmed the findings of many studies that gambling was more common amongst male adolescents than female adolescents (Winters, 2002) and that there were gender differences in gambling rates on specific activities (Hardoon & Derevensky, 2002). In this study, males reported higher involvement in gambling activities and higher participation on all gambling activities, with the exception of playing ludu and lottery games. Male adolescents dominated in games of skills (Delfabbro, Lahn, & Grabosky, 2005) such as cards games, internet games and sports betting. Also male problem gamblers rate were twice that of female adolescents (Hardoon & Derevensky, 2002).

The result of the current study verify an association between gambling participation and ethnic group, culture and religion (Ellenbogen, Gupta, & Derevensky, 2007). About forty five percent of the respondents were Meeteis and 34.6% of the respondents were Nagas. More than half of the respondents were Hindus and 45.1% of the respondents were Christians.

Factors of Adolescents Gambling

Most of the respondents (90%) in Imphal, Manipur gambled for fun and enjoyment. And only 3% of the respondents gambled for money which was very low compared to other countries (61.9%) (Gupta & Derevensky, 1998). There were both

personal and environmental factors of adolescents gambling in Imphal, Manipur. The personal factors were gender, age, education level, ethnic group and religion. When the impact of personal factors on gambling participation was examined, the factors that predicted significant variance of gambling participation were gender, education level and ethnic group.

The environmental factors were availability of games, family, friends, media and technology. The games which were available in Imphal, Manipur were sports betting, Housie Bumper Draw, ludo, card games, internet games, lucky draw, lottery and lagau. And these games were mostly local games and different from those available in other countries.

The present study confirmed that there was an association between respondents' parents gambling frequency and adolescents gambling behavior in Imphal, Manipur ($\chi^2 (384) = 27.977, p < 0.001$). In other countries, families and parents' gambling frequencies predicted adolescent gambling behavior (McComb & Sabiston, 2010). Adolescents were found gambling which was influenced by their parents' gambling (Hardoon, Gupta, & Derevensky, 2004) in other countries. However parents' gambling frequency could not predict adolescents gambling behavior in Imphal, Manipur. From the total respondents (162), 83.3 % of the respondents' parents did not gamble and only 8% respondents' parents gambled a few times a year in Imphal, Manipur. The main environmental factor for adolescents gambling in Imphal, Manipur was friends. From the total gamblers (100) who gambled for prize, 77% of the gamblers played with their friends and 83% of the

gamblers learned about the game they played from their friends. However this study did not verify the friends' sources of knowledge of the games.

The environmental factors for adolescents gambling in Imphal, Manipur also included organizers and advertisements. In other countries, 96% of the youths learned about the game from advertisement on television (Derevensky, Sklar, Gupta, & Messerlian, 2010). However only 6% of the youths in Imphal, Manipur learned about the game from advertisement. The lower percentage of learning about the games from TV or advertisements might be due to the backwardness of Imphal, Manipur. Manipur adolescents accessed to internet, and played internet games (8.6%) and the percentage of internet gamblers may increase rapidly as Manipur is developing quickly. From the environmental factors discussed above, the best predictor for the adolescent gambling in Imphal, Manipur was friend.

Gambling Behavior

The percentage of gambling participation in other countries was high at 80.2% (Gupta & Derevensky, 1998) whereas the rate of gambling participation in Imphal, Manipur was 42.2%. Gambling is illegal in the state and this may be the root cause of the lower rate of gambling participation in Imphal, Manipur. However this study could not confirm the factors of lower rate of gambling participation. The gambling frequency was also lower compared to other countries. Availability of lotteries, casino gambling and other form of games may have resulted in higher rate of gambling participation and gambling frequencies in other countries.

Since Manipur is the most backward state in the country, the gambling expenses and profit are also very low compared to other countries. More than half of

the participants spent less than Rs. 100 which was very low compared to other developed countries. Some adolescents did not even spend a penny to gamble. Four tenth of participants did not gambled for a prize or for money; they gambled for fun or enjoyment. About 43% of participants gambled and won below Rs. 100. Though the amount won by the winners was lower the percentage of winning a game was higher compared to other countries.

More than half of the participants were satisfied with gambling and likely to gamble again in the state so there was a very high possibility for the participants to gamble again in the future. However more gamblers (47%) agreed to ban gambling in the state. About 38% of the gamblers agreed to legalize gambling in the state and 15.4% of the gamblers were undecided to ban or legalize gambling in the state. If Manipur government legalizes gambling in the state, the rate of gambling participation may increase significantly.

Problem Gambling. This study confirmed the previous studies that adolescents were found gambling and had gambling problem in countries where gambling was illegal (Srikanth & Mattamana, 2011). More male adolescents were found to be probable pathological than the female adolescents in Imphal, Manipur. And this was similar to other countries as well. The problem gamblers were from Naga and Meeitei ethnic groups. Sports betting was most frequently played by the problem gamblers. There was an association between problem gambling and sports betting ($\chi^2(162) = 14.071, p = 0.015$) in Imphal, Manipur. The other forms of games were not associated with problem gambling in Imphal, Manipur whereas internet

games (Wong, 2010) and other forms of games were reported gambled and had gambling problems in other countries.

The present findings revealed some good news for people working in the field of problem gambling prevention. DSM-IV-J identified only 1.8% of the respondents (n=162) were probable pathological. And the most frequently reported item endorsed for DSM-IV-J amongst the gamblers was chasing losses (41.6%). The rate of gambling problem was lower than other countries however the rate of problem gambling might increase in the future in Imphal, Manipur.

Preventive Measures

Although gambling is illegal in the state, many youths gambled and developed problem gambling. So preventive measures for adolescent gambling are necessary for the government or law makers, parents, teachers and other social leaders to mitigate and tackle gambling problems in Imphal, Manipur. Since some forms of gambling are accepted by the public, it is very challenging for the governments and social organizations to ban gambling in the state. However Manipur government should restrict gambling and regulate gambling laws in Imphal, Manipur. Internet is easily accessible from anywhere so Manipur government can restrict certain websites such as betting and other gambling websites to limit the students from participating internet games. Parents, teachers, church elders, students unions' leaders and other social leaders should set a goal to prevent the development of problem gambling in young people in Manipur. They themselves should set a good example by not participating in gambling and be the role models for the adolescents. Giving the adolescents the knowledge about gambling may be an essential step in prevention. By providing

adolescents with a more realistic view of gambling than that given by the media, it may be able to limit their interest in gambling and restrict their participation in gambling. Researchers reported that young people developed and entertained irrational thoughts about gambling and become at risk for developing severe gambling problems. And researchers indicated that video significantly improved subjects' knowledge about gambling and corrected their misconceptions (Francine Ferland, 2002). So teachers and educators in Imphal, Manipur should use and show an awareness videos on gambling in schools to discourage the young people from gambling. The consequences of gambling problem should be also well discussed with the young people by teachers, educators and parents.

Strikes, riots and other political turmoil are unpredictable in Manipur. When such events occur, teachers and educators should assign works, projects and other study-related assignments to students to engage them in continuous learning. These assignments may divert the students' behavior from participating in gambling during the study breaks or holidays as well. Schools and other similar institutions should not entertain any forms of gambling activities and restrict any form of gambling activities either inside or outside the institutions.

Since friends were the best predictor or motivator for gambling participation in Manipur, parents should look after their child and should not allow their child to go or mingle with bad friends. Parents should also spend time with their children. Parents should engage their children with house chores or other activities at home and have a family time together. This will help the child to develop their confidence level and become more self-reliable, self-assured and happier in the future. Parents are also

responsible to deal openly with any issues of their child to bring them up properly.

Parents are the most influential role models the children have. Parents should give positive compliments and show respect, kindness, honesty, friendliness, hospitality and generosity to their children may encourage them to behave in the same way.

Among preventive measures, teachers, educators and parents are the best role models and mentors for the adolescents in Manipur.

Limitations

Very limited literatures on adolescents gambling are available for Manipur, India and there are no statistics available for Imphal, Manipur to relate the current study. The present study used the concepts, models, instruments and procedure based on previous studies conducted in other countries. And these countries' cultures, lifestyle, economy, government, etc. are very different from those in Manipur. This study modified and adjusted many items which may have limited certain findings. Since no study has ever been conducted on gambling in Imphal, the present study could not cover many areas on gambling related studies. This study excluded factors such as government, accessibility, acceptability and other addictive behavior to limit the scope of this study. This study also excluded the study of relationships between personal factors and environmental factors, adolescents' behavior predicting gambling problem and adult gambling behavior. This study included only seventh to twelfth grade adolescents which was a very small group. This study included participants from only the most common and large ethnic groups. Manipur community is very diverse and there are many small tribes; this study included only certain groups. For instance, naga ethnic group is composed of more than 65 (Tohring, 2010) smaller

tribal groups (scheduled tribes) however this study used only naga (common group) to scope the limit of the study. Though the responders in Imphal, Manipur smoked cigarette (14%), drank alcohol (14%), smoked marijuana (8.5%), took heroin (3.7%) and took spasmo-proxyvon (3%), this study excluded the study of correlation between gambling behavior and drug use. This study also excluded the study of correlation between gambling behavior and other risk taking behaviors in Imphal, Manipur.

There are many forms of games available in the state; this study included only the most common games. This study could not list more local games apart from the listed games in the study and the list of games were very small compare to other countries. This present study could not confirm the relationship between adolescent gambling behavior, parental monitoring, partners gambling and antisocial behavior. Lastly, contrary to the literature review and conceptual framework, the present study could not predict adolescent gambling problem and adult gambling behavior. So further studies on gambling are needed in Manipur.

Future Directions

Follow-up study on adolescent gambling is required for Manipur. Future study should focus on the certain independent variables such as lifestyle that can be observed to regress those variables on dependent variables to see their impacts on dependent variables. This way the researcher can use the result to predict and prevent adolescent gambling better. Researcher may use latent class analysis or latent variable sampling and factor analysis to find those unobservable variables of adolescent gambling behavior. Further study should include younger adolescents. Since Manipur is too diverse, study on gambling should be conducted in all the nine districts of

Manipur. Study on adult gambling should be also conducted in Manipur. This present study can be very beneficial for law makers, governments or countries where gambling is illegal.

Literatures reviews and previous studies in other countries showed the rising of adolescents' participation in gambling and addressed adolescent gambling issues (Campbell, Derevensky, Meerkamper, & Cutajar, 2012). The rate of adolescent participation in gambling increased significantly in many countries so it is very important to study further in details on adolescent gambling and adolescent gambling problem to mitigate adolescents gambling and adolescent gambling problem.

Most of the past researches on adolescent gambling were conducted in developed countries such as United Kingdom, Canada, United States of America, North America, Europe, New Zealand and Australia whereas small number of researches was conducted in other developing countries. This created a gap between the availability of literatures for these western and eastern countries. More research on adolescent gambling should be conducted in developing countries to fill the gap.

Problem gambling was found amongst ethnic groups which was associated with acculturation difficulties (Ellenbogen et al., 2007) and that younger youths favored gambling more than the older youths (Campbell et al., 2012). So it is very important to conduct research on gambling amongst the different ethnic groups and ethnic minorities as culture has greater impact towards gambling. Many researchers also directed to study on adolescent gambling as adolescents gambled more than adult and found severe gambling problems amongst the adolescence. There is a need for preventive measures to tackle this gambling problem (Ariyabuddhiphongs, 2013).

Future research on drinking alcohol and gambling concurrence must include gambling environment to study and produce relevant findings (Markham, Young, & Doran, 2012). Researchers also focused on gambling and tobacco use (McGrath, Barrett, Stewart, & McGrath, 2012). So, further research on adolescent gambling should be conducted including substances uses variables.

Adolescent participation in internet gambling increased rapidly due to the availability of new technology and researchers also suggested to study further on adolescent gambling as internet is facilitating gambling behaviors (Griffiths & Barnes, 2008).

Conclusions

This study has shown that gambling is widespread in Manipur. As gambling has become more available, gamblers have become more diverse. There is much to be gained from understanding of gendered gambling behavior, in the context of a study of gambling participation and attitudes rather than studying problem gambling. This study has also shown that adolescents gambling participation is significantly associated with a wide range of social variables. There is little evidence available in this study whether adolescents gambling could leads to adult gambling, and adolescents gambling behavior could predict adult problem gambling. So further studies are necessary to adequately understand the relationship between adolescents gambling behaviors and adult gambling behaviors. There is also a need for further study examining more specific determinants including the influence of gambling with friends and accessibility of different forms of gambling to young people.

BIBLIOGRAPHY

- Adams, P. J. (2008). *Is democratic gambling reform possible? Australian Review of Public Affairs*. Retrieved from <http://www.australianreview.net/digest/2009/03/mcmillen.html>
- Adebayo, B. (1998). Gambling behavior of students in grades seven and eight in Alberta, Canada. *Journal of School Health*, 68(1), 7.
- Albert, Y. (2013). Electricity in Imphal: on or off. *Imphal Free Press*. Retrieved from http://kanglaonline.com/2013/01/electricity-in-imphal-on-or-off/?utm_source=rss&utm_medium=rss&utm_campaign=electricity-in-imphal-on-or-off
- Arcuri, A. F., Lester, D., & Smith, F. O. (1985). Shaping adolescent gambling behavior. *Journal of Gambling Behavior*, 5(1), 66-83.
- Ariyabuddhiphongs, V. (2013). Adolescent Gambling: A Narrative Review of Behavior and Its Predictors. *International Journal of Mental Health & Addiction*, 11(1), 97-109. doi: 10.1007/s11469-012-9401-6
- Bandura, A. (1986). *Social foundations of thought and action. A social cognitive theory*. Eaglewood Cliffs: Prentice-Hall.
- Barnes, G. M., Welte, J. W., Hoffman, J. H., & Dintcheff, B. A. (2002). Effects of Alcohol Misuse on Gambling Patterns in Youth. *Journal of Studies on Alcohol*, 63(6), 767.
- Benegal, V. (2013). Gambling experiences, problems and policy in India: a historical analysis. *Addiction*, 108(12), 2062-2067. doi: 10.1111/j.1360-0443.2012.04068.x

- Burns, J. F. (2011). Britain: Cricket-Fixing Charges. *New York Times*, 5.
- Campbell, C., Derevensky, J., Meerkamper, E., & Cutajar, J. (2012). The Influence of Cultural Background on Parental Perceptions of Adolescent Gambling Behaviour: A Canadian Study. *International Journal of Mental Health & Addiction*, 10(4), 537-550. doi: 10.1007/s11469-011-9337-2
- Cartaxo, P., Andre, J., Rolim Neto, Leite, M., de Abreu, & Carlos, L. (2013). Adolescence and sexuality. *HealthMed*, 7(4), 1094-1097.
- Census. (2011a). *Literacy in India*. Retrieved from <http://www.census2011.co.in/literacy.php>
- Census. (2011b). *Manipur Population*. Retrieved from <http://www.census2011.co.in/census/state/manipur.html>
- Chibber, R., & Khurranna, A. (2005). Birth outcomes in perinatally HIV-infected adolescents and young adults in Manipur, India: a new frontier. *Archives of Gynecology & Obstetrics*, 271(2), 127-131. doi: 10.1007/s00404-003-0564-z
- Commerce and Industries, D. (2013). *Invest in Manipur - Unemployment*. Retrieved from http://investinmanipur.nic.in/gp_unemp.htm
- Correspondent, S. (2011). Manipur records highest crime rate, Assam 4th. *The Assam Tribune*. Retrieved from <http://www.assamtribune.com/scripts/detailsnew.asp?id=oct2811/at09>
- Delfabbro, Lahn, J., & Grabosky, P. (2005). Further evidence concerning the prevalence of adolescent gambling and problem gambling in Australia: A study of the ACT. *International Gambling Studies*, 5(2), 209-228.

- Delfabbro, & Thrupp, L. (2003). The social determinants of youth gambling in South Australian adolescents. *Journal of Adolescence*, 26(3), 313. doi: 10.1016/s0140-1971(03)00013-7
- Department of Information Technology, G. (2014). *At a glance. Government of Manipur*. Retrieved from http://manipur.gov.in/?page_id=3507
- Derevensky, J., Sklar, A., Gupta, R., & Messerlian, C. (2010). An Empirical Study Examining the Impact of Gambling Advertisements on Adolescent Gambling Attitudes and Behaviors. *International Journal of Mental Health & Addiction*, 8(1), 21-34. doi: 10.1007/s11469-009-9211-7
- Derevensky, J. L., Gupta, R., & Magoon, M. (2004). Adolescent Problem Gambling: Legislative and Policy Decisions. *Gaming Law Review*, 8(2), 107-117.
- Duhig, A. M., Maciejewski, P. K., Desai, R. A., Krishnan-Sarin, S., & Potenza, M. N. (2007). Characteristics of adolescent past-year gamblers and non-gamblers in relation to alcohol drinking. *Addictive Behaviors*, 32(1), 80-89. doi: 10.1016/j.addbeh.2006.03.021
- Economist. (2010). State of concern. *Economist*, 394(8670), 40-41.
- Economist. (2011). Overstepping the mark. *Economist*, 401(8758), 67-67.
- Ellenbogen, S., Gupta, R., & Derevensky, J. L. (2007). A Cross-Cultural Study of Gambling Behaviour Among Adolescents. *Journal of Gambling Studies*, 23(1), 25-39.
- Express, T. S. (2013). *Dog put up as Tambola prize rescued by police, E-Pao*. Retrieved from <http://www.thesangaiexpress.com/tseitm-28126-dog-put-up-as-tambola-prize-rescued-by-police/>

- Felsher, J. R., Derevensky, J. L., & Gupta, R. (2003). Parental influences and social modelling of youth lottery participation. *Journal of Community & Applied Social Psychology, 13*(5), 361-377. doi: 10.1002/casp.738
- Fisher, P. D. S. (1993). Gambling and pathological gambling in adolescents. *Journal of Gambling Studies, 9*(3), 277-288. doi: 10.1007/BF01015923
- Forrest, D., & McHale, I. (2012). Gambling and Problem Gambling Among Young Adolescents in Great Britain. *Journal of gambling studies, 28*(4), 607-622. doi: 10.1007/s10899-011-9277-6
- Francine Ferland, R. L., Frank Vitaro. (2002). Prevention of Problem Gambling: Modifying Misconceptions and Increasing Knowledge. *Journal of Gambling Studies, 18*(1), 19-29. doi: 10.1023/A:1014528128578
- Gavriel, B., Teichman, M., & Rahav, G. (2010). Adolescent gambling: Temperament, sense of coherence and exposure to advertising. *Addiction Research & Theory, 18*(5), 586-598. doi: 10.3109/16066350903428945
- Gerdner, A., & Svensson, K. (2003). Predictors of gambling problems among male adolescents. *International Journal of Social Welfare, 12*(3), 182-192. doi: 10.1111/1468-2397.t01-1-00006
- Gillespie, J. L. D. a. M. (2005). Keynote Address: Gambling in Canada. *International Journal Of Mental Health & Addiction, 3*, 3-14.
- Giroux, I., Jacques, C., Ladouceur, R., Leclerc, M., & Brochu, P. (2012). Prévalence des habitudes de jeu en Gaspésie et aux Îles-de-la-Madeleine en 2009. (French). *Canadian Journal of Psychiatry, 57*(3), 192-199.

- Goodyear-Smith, F., Arroll, B., Kerse, N., Sullivan, S., Coupe, N., Tse, S., Perese, L. (2006). Primary care patients reporting concerns about their gambling frequently have other co-occurring lifestyle and mental health issues. *BMC Family Practice*, 7, 25-26. doi: 10.1186/1471-2296-7-25
- Grant, J. E., & Suck, W. K. (2002). Parental Bonding in Pathological Gambling Disorder. *Psychiatric Quarterly*, 73(3), 239.
- Griffiths. (1991). The Observational Study of Adolescent Gambling in UK Amusement Arcades. *Journal of Community & Applied Social Psychology*, 1(4), 309-320.
- Griffiths, & Barnes, A. (2008). Internet Gambling: An Online Empirical Study Among Student Gamblers. *International Journal of Mental Health & Addiction*, 6(2), 194-204. doi: 10.1007/s11469-007-9083-7
- Griffiths, & Wood. (2002). Adolescent perceptions of the National Lottery and scratchcards: a qualitative study using group interviews. *Journal of Adolescence*, 25, 655-668. doi: <http://dx.doi.org/10.1006/jado.2002.0515>
- Guha, R. (2007). A War in the Heart of India. *Nation*, 285(3), 28-31.
- Gupta, & Derevensky. (1998). Adolescent Gambling Behavior: A Prevalence Study and Examination of the Correlates Associated with Problem Gambling. *Journal of gambling studies*, 14(4), 319-345. doi: 10.1023/A:1023068925328
- Gupta, Derevensky, J., & Marget, N. (2004). Coping Strategies Employed by Adolescents with Gambling Problems. *Child & Adolescent Mental Health*, 9(3), 115-120. doi: 10.1111/j.1475-3588.2004.00092.x

- Haokip, G. T. (2012). On ethnicity and development imperative: a case study of North-East India. *Asian Ethnicity*, 13(3), 217-228. doi: 10.1080/14631369.2012.630571
- Hardoon, & Derevensky, J. L. (2002). Child and Adolescent Gambling Behavior: Current Knowledge. *Clinical Child Psychology & Psychiatry*, 7(2), 263.
- Hardoon, Gupta, R., & Derevensky, J. (2004). Psychosocial variables associated with adolescent gambling. *Psychol Addict Behav*, 18(2), 170-179
- Hartney, E. (2011, April 9, 2014). *What is pathological gambling?* Retrieved from <http://addictions.about.com/od/compulsivegambling/a/defgambling.htm>
- Holden, N. (1995). *Adolescent health problems* (21 ed.), 7-21. Retrieved from <http://books.google.co.th/books?>
- Hueiyen, N. S. (2013, 24 December 2013). Daily Newspaper pages flooded with advertisements for Housie Draws, News, *Hueiyen News Service*, p. 9. Retrieved from <http://www.hueiyenlanpao.com/articles/item/16061-on-page-number-9?tmpl=component&print=1>
- India, C. o. (2012). *Religious Composition*. Retrieved from <http://en.wikipedia.org/wiki/Manipur>
- Ixigo. (2015). *Shopping mall*. Retrieved from <http://www.ixigo.com/shopping-malls-in-at-around-near-imphal-lp-1143814>
- Jackson, A. C., Dowling, N., Thomas, S. A., Bond, L., & Patton, G. (2008). Adolescent Gambling Behaviour and Attitudes: A Prevalence Study and Correlates in an Australian Population. *International Journal of Mental Health & Addiction*, 6(3), 325-352. doi: 10.1007/s11469-008-9149-1

- Jacobs. (2000). Juvenile Gambling in North America: An Analysis of Long Term Trends and Future Prospects. *Journal of gambling studies*, 16(2-3), 119-152. doi: 10.1023/A:1009476829902
- Jacobs. (2004). *Youth gambling in North America: Long-term trends and future prospects*, 1-24. Retrieve from <http://www.google.co.th/url?>
- Jacobs. (2005). Gambling Problems in Youth. 1-24. doi: 10.1007/0-306-48586-9_1
- Kermode, M., Longleng, V., Singh, B. C., Hocking, J., Langkham, B., & Crofts, N. (2007). My first time: initiation into injecting drug use in Manipur and Nagaland, north-east India. *Harm Reduction Journal*, 4, 19-29. doi: 10.1186/1477-7517-4-19
- Korman, L. M., Collins, J., Dutton, D., Dhayanathan, B., Littman-Sharp, N., & Skinner, W. (2008). Problem Gambling and Intimate Partner Violence. *Journal of gambling studies*, 24(1), 13-23. doi: 10.1007/s10899-007-9077-1
- Kristiansen, S. G., & Jensen, S. M. (2014). Prevalence and correlates of problematic gambling among Danish adolescents. *International Journal of Social Welfare*, 23(1), 89-99. doi: 10.1111/ijsw.12021
- Ladouceur, R., Blaszczynski, A., & Pelletier, A. (2004). Why Adolescent Problem Gamblers Do Not Seek Treatment. *Journal of Child & Adolescent Substance Abuse*, 13(4), 1-12. doi: 10.1300/JO29v13n04A01
- Ladouceur, R., Dubé, D., & Bujold, A. (1994). Prevalence of pathological gambling and related problems among college students in the Quebec metropolitan area. *The Canadian Journal of Psychiatry*, 39(5), 289-293.

- Lester, J. L. (2010). How to Legally Gamble in the Bible Belt. *Cumberland Law Review*, 41(3), 491-508.
- Manipur, G. o. (2014). *The people. E-Government*. Retrieved from http://manipur.gov.in/?page_id=3696
- Markham, F., Young, M., & Doran, B. (2012). The relationship between alcohol consumption, gambling behaviour and problem gambling during a single visit to a gambling venue. *Drug & Alcohol Review*, 31(6), 770-777. doi: 10.1111/j.1465-3362.2012.00430.x
- McComb, J., & Sabiston, C. (2010). Family Influences on Adolescent Gambling Behavior: A Review of the Literature. *Journal of gambling studies*, 26(4), 503-520. doi: 10.1007/s10899-010-9181-5
- McDuie-Ra, D. (2014). Ethnicity and place in a 'disturbed city': ways of belonging in Imphal, Manipur. *Asian Ethnicity*, 15(3), 374-393. doi: 10.1080/14631369.2014.915488
- McGrath, D. S., Barrett, S. P., Stewart, S. H., & McGrath, P. R. (2012). A Comparison of Gambling Behavior, Problem Gambling Indices, and Reasons for Gambling Among Smokers and Nonsmokers Who Gamble: Evidence from a Provincial Gambling Prevalence Study. *Nicotine & Tobacco Research*, 14(7), 833-839.
- Medhi, G. K., Mahanta, J., Paranjape, R. S., Adhikary, R., Singh, S. G., Akoijam S, B., & Goswami, P. (2012). Factors associated with ever HIV testing among injecting drug users (IDUs) in two HIV high prevalent States of India. *Indian Journal of Medical Research*, 64-71.

- Moodie, C., & Finnigan, F. (2006). Prevalence and correlates of youth gambling in Scotland. *Addiction Research & Theory, 14*(4), 365-385. doi: 10.1080/16066350500498015
- Nischal, A., Agarwal, M., & Agarwal, A. (2013). Need for Research in Substance Abuse in Children and Adolescents in India, Editorial, *Journal of Indian Association for Child & Adolescent Mental Health*, pp. 22-25. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=90546294&site=ehost-live>
- Olason, D. T., Sigurdardottir, K. J., & Smari, J. (2006). Prevalence Estimates of Gambling Participation and Problem Gambling among 16-18-year-old Students in Iceland: A Comparison of the SOGS-RA and DSM-IV-MR-J. *Journal of gambling studies, 22*(1), 23-39. doi: 10.1007/s10899-005-9001-5
- Osborne, G. (2012). *Gambling in Manipur*. Retrieved from <http://www.indiabet.com/manipur/496353/gambling-in-manipur>
- Panmei, L. R., & Singh, S. R. K. (2013). Population Growth and Pattern of Density in Manipur. *Golden Research Thoughts, 2*(8), 1-6.
- Pietrzak, R. H., Ladd, G. T., & Petry, N. M. (2003). Disordered Gambling in Adolescents. *Pediatric Drugs, 5*(9), 583-595.
- Radecki, M. D., & Thomas, E. (1994). The sales of lottery tickets to minors in Illinois. *Journal of Gambling Studies, 10*(3), 213-218. doi: 10.1007/BF02104963
- Reporter, S. (2015). *Vandalised*. Retrieved from <http://www.thesangaiexpress.com/page/items/47188/vandalised>

- Richey, W. (1998). Youth gambling, even at elementary level, spreads across US. *Christian Science Monitor*, 90(178), 3.
- Robert, E., Mann, J., & Zangeneh, M. (2004). Gambling in ethnic adolescent populations: An exploratory study of the utility of Problem Behaviour Theory as an explanatory framework. *COSTI Immigrant Services*. Retrieved from <http://www.costi.org/community/pgs.php>.
- Sarkar, R., Sarkar, K., Brajachand Singh, N., Manihar Singh, Y., Mitra, D., & Chakrabarti, S. (2012). Emergence of a unique recombinant form of HIV-1 from Manipur (India). *Journal of Clinical Virology*, 55(3), 274-277. doi: 10.1016/j.jcv.2012.07.012
- Sayta, J. (2010, 10/10/2010). *Central Government Act*. Retrieved from <http://glaws.in/2010/10/gambling-laws-in-india-an-introduction-2/>
- Shaffer, D. H. J., & Hall, M. N. (1996). Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. *Journal of Gambling Studies*, 12(2), 193-214. doi: 10.1007/BF01539174
- Shed, N., Walsh, K., Taylor, A., Derevensky, J. L., & Gupta, R. (2011). Youth Gambling Prevention: Can Public Service Announcements Featuring Celebrity Spokespersons be Effective? *International Journal of Mental Health & Addiction*, 9(2), 165-179. doi: 10.1007/s11469-009-9260-y
- Singha, K. (2013). Conflict, State and Education in India: A Study of Manipur. *American Journal of Educational Research*, 1(6), 181. doi: 10.12691

- Srikanth, V., & Mattamana, A. B. (2011). Regulating online gambling: The Indian perspective. *Computer Law & Security Review*, 27(2), 180-188. doi: 10.1016/j.clsr.2011.01.002
- Stewart, S. H., & Kushner, M. G. (2005). Introduction to the Special Issue on "Relations Between Gambling and Alcohol Use". *Journal of Gambling Studies*, 21(3), 223-231. doi: 10.1007/s10899-005-3097-5
- Stinchfield, R. (2000). Gambling and Correlates of Gambling Among Minnesota Public School Students. *Journal of Gambling Studies*, 16(2-3), 153-174. doi: 10.1023/A:1009428913972
- Thokchom, K. (2007, February 27, 2007). Elections are as good as a gamble' You bet! *The Telegraph*. Retrieved from http://www.telegraphindia.com/1070227/asp/northeast/story_7443369.asp
- Tohring, S. R. (2010). *Violence and Identity in North-east India: Naga-Kuki Conflict Vol. 2015*. Retrieved from Worldcat database Retrieved from https://en.wikipedia.org/wiki/List_of_Naga_tribes
- Tsitsika, A., Critselis, E., Kormas, G., Filippopoulou, A., Tounissidou, D., Freskou, A., . . . Kafetzis, D. (2009). Internet use and misuse: a multivariate regression analysis of the predictive factors of internet use among Greek adolescents. *European Journal of Pediatrics*, 168(6), 655-665. doi: 10.1007/s00431-008-0811-1
- Turner, N. E., Macdonald, J., Bartoshuk, M., & Zangeneh, M. (2007). Adolescent Gambling Behavior, Attitudes, and Gambling Problems. *Int J Ment Health Addiction*, 223-237. doi: 10.1007/s11469-007-9117-1

- Wanner, B., Vitaro, F., Carbonneau, R., & Tremblay, R. E. (2009). Cross-lagged links among gambling, substance use, and delinquency from midadolescence to young adulthood: Additive and moderating effects of common risk factors. . *Psychology of Addictive Behaviors*, 23(1), 91-104. doi: 10.1037/a0013182
- Webster, M. (2015). *Adolescent definition*. Retrieved from <http://www.merriam-webster.com/dictionary/adolescent>
- Welte, J. W., Barnes, G. M., Wieczorek, W. F., Tidwell, M.-C., & Parker, J. (2002). Gambling Participation in the U.S. — Results from a National Survey. *Journal of Gambling Studies*, 18(4), 313.
- Winters, K. C. S., Randy D.; Botzet, Andria; Anderson, Nicole (2002). A prospective study of youth gambling behaviors. 16(1). doi: 10.1037/0893-164X.16.1.3
- Wong, I. L. K. (2010). Internet Gambling: A School-Based Survey Among Macau Students. *Social Behavior & Personality: An International Journal*, 38(3), 365-371.
- Wood, R. T. A., Gupta, R., Derevensky, J. L., & Griffiths, M. (2004). Video Game Playing and Gambling in Adolescents: Common Risk Factors. *Journal of Child & Adolescent Substance Abuse*, 14(1), 77-100. doi: 10.1300/J029v14n01_05
- Zangeneh, M., Mann, R. E., McCready, J., & Oseni, L. (2010). Gambling in Ethnic Adolescent Populations: An Exploratory Study of the Utility of Problem Behaviour Theory as an Explanatory Framework. *International Journal Of Mental Health & Addiction*, 8(1), 51-69. doi: 10.1007/s11469-009-9220-6



APPENDIX A: Questionnaire in English

_____2014

Dear Participant,

Thank you for taking your time to respond to this questionnaire. I am doing a research on adolescent gambling in Imphal (Manipur) and would very much appreciate your responses to the attached questionnaire. The first part of the questionnaire contains questions regarding your gambling behaviour; there is no right or wrong response as each response reflects your current thought, attitude, and behaviour. The second part of the questionnaire contains questions regarding your personal data including your parent's data. This part does not identify you by name; your data will not be revealed to anyone; and the research paper will report only aggregate data. You may be assured that your response will be kept confidential. If you have any question concerning this research I can be reached at +66-859-4919-96 or by e-mail: pisgah3@gmail.com.

Thank you very much for your cooperation.

Sincerely,

Pisgahbuan Gonmei,
Investigator

Respondent's Consent Form:

I acknowledge that I have been informed by the investigator of the nature and purpose of this research, and I am freely choosing to participate without duress or coercion.

I understand that I may refuse to participate or withdraw my consent at any time I wish without having to state any reason, penalty or prejudice.

I have been assured by the investigator that any information I provide will be anonymous and kept confidential, and the research result will not disclose any personal data.

I am indicating that my parents have consented to my participation in this study under the above conditions.

Respondent

Part 1: Gambling Behaviour

1. Have you ever participated in any type of gambling listed below in past year?
 - 1 Yes, (If yes, then pick from the list) 2 No, (Then go to question # 14)
 - a. Playing Card (Jawar – Rummy, Dus Phabi, Duri Point, Flash, Nagaland Point etc.)
 - b. Housie Bumper Draw (Bingo)
 - c. Lottery (Scratches)
 - d. Lucky Draw
 - e. Sports Betting (Football, Cricket, Bull, Horse, Cock, Carom etc.)
 - f. Lagau (Dice)
 - g. Ludu (Soka)
 - h. Internet Gambling
 - i. Others: Please specify
-

Note: If you pick more than 1 then please specify which one you gamble the most.

2. How often did you gamble this particular game?
 - 1 Once a year 2 A few times a year 3 Once a month
 - 4 A few times a month 5 Once a week
 - 6 A few times a week 7 Everyday
3. Did you gamble this particular game the last time you play for a prize that has a value?

- 1 Yes, (If yes, then go to next question) 2 No, (Then go to question # 14)
4. How much (in cash or value of bet/ticket/stake) did you spend the last time you played that particular game?
- 1 Below Rs.100 2 Rs.101- 500 3 Rs.501 – 1,000
 4 Rs.1,001–1,500 5 Rs.1,501-2,000 6 R.2,001-2,500
 7 Rs.2,501-3,000 8 Rs.3,001-3,500 9 Rs.3,501-4,000
 10 Rs.4,001-4,500 11 Rs.4,501-5,000 12 Rs.5,001 & above
5. From where did you get the money/bets the last time you played that particular game?
- 1 Income 2 Parents
 3 Borrowed from someone 4 Stolen/illegal money
6. Did you win the last time you played that particular game?
- 1 Yes 2 No, (Then go to question #8)
 3 Draw/Tie, (Then go to next question)
7. How much did you win (in cash or value of prize) the last time you played that particular game?
- 1 Below Rs.100 2 Rs.101- 500 3 Rs.501 – 1,000
 4 Rs.1,001–1,500 5 Rs.1,501-2,000 6 R.2,001-2,500
 7 Rs.2,501-3,000 8 Rs.3,001-3,500 9 Rs.3,501-4,000
 10 Rs.4,001-4,500 11 Rs.4,501-5,000 12 Rs.5,001 & above
8. Whom did you gamble with the last time you played that particular game?
- 1 Friends 2 Families and relatives 3 Strangers
 4 Organizers
9. From where did you learn about the game the last time you played?
- 1 Friends 2 Families and relatives 3 Strangers
 4 Organizers 5 Advertisement
10. Why did you gamble the last time you played that particular game?
- 1 Fun/Enjoyment 2 To make a living 3 To become rich
 4 Charity 5 Others _____
11. How satisfied were you the last time you played that particular game?
- 1 Very unsatisfied 2 Unsatisfied 3 Somewhat unsatisfied

- 4 Neither satisfied nor unsatisfied 5 Somewhat satisfied
6 Satisfied 7 Very satisfied

12. How likely are you to gamble this particular game again?

- 1 Very unlikely 2 Unlikely 3 Somewhat unlikely
4 Neither likely nor unlikely 5 Somewhat likely 6 Likely
7 Very likely

13. Pathological gambling behaviour (DMS-IV J): Do you

No	Symptoms	Yes	No
1	Think about gambling all the time.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
2	Spend more and more money on gambling.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
3	Become tense, restless, when trying to cut down.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
4	Gamble as a way of escaping from problems.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
5	Chase losses (gamble to get back the money you lost).	1 <input type="checkbox"/>	2 <input type="checkbox"/>
6	Lie to family and friends about gambling behavior.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
7	Use other money (e.g. lunch money) for gambling.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
8	Take money from family to gamble without telling them.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
9	Steal money from outside family to gamble.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
10	Fall out with family because of gambling behavior.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
11	Skip school more than 5 times to gamble in past year.	1 <input type="checkbox"/>	2 <input type="checkbox"/>
12	Seek help for serious money worry caused by gambling.	1 <input type="checkbox"/>	2 <input type="checkbox"/>

14. To what extent do you agree or disagree with statement that all forms of gambling should be banned in the state of Manipur?

- 1 Strongly disagree 2 Disagree 3 Undecided
4 Agree 5 Strongly agree

15. How often did you smoke in past year?

- 1 Never 2 Once a year 3 A few times a year
4 Once a month 5 A few times a month 6 Once a week
7 Few times a week 8 Everyday (please indicate the number of cigarettes...)

16. How often did you drink alcohol in past year?

- 1 Never 2 Once a year 3 A few times a year

- 4 Once a month 5 A few times a month 6 Once a week
7 Few times a week 8 Everyday (please indicate the number of bottles....)

17. How often did you use marijuana (ganja/cannabis) in past year?

- 1 Never 2 Once a year 3 A few times a year
4 Once a month 5 A few times a month 6 Once a week
7 Few times a week 8 Everyday (please indicate the number of pipes :.....)

18. How often did you take spasmoproxyvon (SP) in past year?

- 1 Never 2 Once a year 3 A few times a year
4 Once a month 5 A few times a month 6 Once a week
7 Few times a week 8 Everyday (please indicate the number of pills/needle injection_)

19. How often did you take heroin in past year?

- 1 Never 2 Once a year 3 A few times a year
4 Once a month 5 A few times a month 6 Once a week
7 Few times a week 8 Everyday (please indicate the number of needle injections :.....)

20. How often did your parents gamble in past year?

- 1 Never 2 Once a year 3 A few times a year
4 Once a month 5 A few times a month 6 Once a week
7 Few times a week 8 Everyday 9 Not sure

Part 2a: Personal Data

21. Gender: 1 Male 2 Female

22. Age: _____

23. Education level: 1 Class 7-8 2 Class 9-10 3 Class 11-12

24. Ethnic Group: 1 Meetei 2 Pangal 3 Naga 4 Kuki 5 Others

25. Religion: 1 Hinduism 2 Christianity 3 Muslim 4 Others

Part 2b: Parent's data:

26. Parent's marital status: 1 Married 2 Divorced/Separate
3 Widowed/Widower



APPENDIX B: Map of Imphal (Manipur), India



BIODATA

Name: Pisgahbuan Gonmei

Address: 435, Charoen Mansion, Ladphrao – 96, Bangkok – 10310

Email: pisgah3@gmail.com

Contact: +66 – (0)85-949-1996

Education Background:

- Bachelor of Science (2005-08)
English, French, Chemistry, Environmental Science and Zoology
St. Joseph's College, Bangalore (Bangalore University, India)
- Pre-University College of Science (2005)
English, French, Chemistry, Physics, Biology and Mathematics
Lowry Memorial College, Bangalore (Bangalore University, India)

Work Experience:

- Saint Francis Xavier School (April 2013 – Present)
Homeroom and Science Teacher, 39/4 Chaengwattana Road, Pakkred,
Nonthaburi 11120, Thailand.
- Metis education center (August, 2012 till date)
English Instructor (Speaking, Listening, TOEIC, TOEFL and IELTS)
Chatuchak, Bangkok, Thailand.
- Sarasas Witaed School (May 2012 – July 2012)
English Teacher (Listening, Reading, Writing and Speaking)
Bambuathong, Bangkok, Thailand.

- English Program Benchama Maharat School (March 2010 to March 2012)
Homeroom and Science Teacher (Basic and Supplemental of all Sciences)

Ubon Ratchathani, Thailand.

- Vantage Agora (April 2008 – July 2009)

Rater (Underwriting support)

Bangalore, India.



Bangkok University

License Agreement of Dissertation/Thesis/ Report of Senior Project

Day 7 Month April Year 2016

✓ Mr./ Mrs./ Ms Pisgahbuan Genmei now living at 435, Charoen Mansien
Soi 96 Street Ladphrao
Sub-district Wangthonglang District Bangkok
Province Bangkok Postal Code 10310 being a Bangkok
University student, student ID 7550201292

Degree level Bachelor Master Doctorate

Program M.B.A Department - School Graduate School
hereafter referred to as "the licensor"

Bangkok University 119 Rama 4 Road, Klong-Toey, Bangkok 10110 hereafter referred to as "the licensee"

Both parties have agreed on the following terms and conditions:

1. The licensor certifies that he/she is the author and possesses the exclusive rights of dissertation/thesis/report of senior project entitled


Adolescent gambling in Imphal (Manipur), India


submitted in partial fulfillment of the requirement for M.B.A
of Bangkok University (hereafter referred to as "dissertation/thesis/ report of senior project").

2. The licensor grants to the licensee an indefinite and royalty free license of his/her dissertation/thesis/report of senior project to reproduce, adapt, distribute, rent out the original or copy of the manuscript.

3. In case of any dispute in the copyright of the dissertation/thesis/report of senior project between the licensor and others, or between the licensee and others, or any other inconveniences in regard to the copyright that prevent the licensee from reproducing, adapting or distributing the manuscript, the licensor agrees to indemnify the licensee against any damage incurred.

This agreement is prepared in duplicate identical wording for two copies. Both parties have read and fully understand its contents and agree to comply with the above terms and conditions. Each party shall retain one signed copy of the agreement.



() Licensor



(Director, Library and Learning Center) Licensee



(Dean, Graduate School) Witness



(Program Director) Witness