FACTORS INFLUENCING
ONLINE GAMBLING ACCEPTANCE
AMONG THAI UNDERGRADUATE STUDENTS

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by

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

x

Page

LIST OF ABBREVIATIONS

ACC	Accessibility
AFF	Affordability
ALC	Alcohols Consumption
ANO	Anonymity
AVE	Average Variance Explained
BI	Behavioral Intention to Use
CON	Convenience
ENJ	Perceived Enjoyment
ESC	Escape
FAIR	Perceived Fairness
FAM	Family Involvement
H	Hypothesis
HOC	Higher Order Construct
HTMT	Heterotrait-monotrait
LOC	Lower Order Construct
LV	Latent Variable
M	Means
PEOU	Perceived Ease of Use
PLS	The Partial Least Square
PU	Perceived Usefulness
SD	Standard Deviation
SEM	The Structural Equation Model
SIM	Simulation
TAM	Technology Acceptance Model
USE	Usage Behaviors

VIF   Variance Inflation Factor

LIST OF APPENDICES

FAKTOR-FAKTOR YANG MEMPENGARUHI PENERIMAAN PERJUDIAN ATAS TALIAN DALAM KALANGAN PRASISWAZAH THAI

ABSTRAK

Pengetahuan berfokuskan faktor-faktor penyebab niat perlakuan individu menggunakan internet untuk tujuan berjudi masih kekurangan meskipun perjudian dalam talian semakin berleluasa, khasnya di kalangan muda-mudi Thai. Demi mengisi lompang tersebut, penyelidikan ini bermatlamat untuk mengkaji faktor-faktor yang menampakkan impak terhadap perlakuan kalangan siswazah Thai. Justeru itu, faktor-faktor perseorangan, psikologikal serta teknologi bakal digunakan untuk merekacipta sebuah model TAM (Technological Acceptance Model) yang serba komprehensif demi menjelaskan sebab-sebab siswazah Thai berkecenderungan berjudi atas talian. Penyelidikan berupa kaji selidik survei ini melibatkan seramai 202 responden, kesemuanya siswazah Thai yang kini menuntut di Thailand. Kutipan data penyelidikan ini menggunakan borang kaji selidik atas talian di mana ia membabitkan responden yang (1) serba berpengetahuan tentang perjudian atas talian, (2) pernah atau telah biasa berpengalaman berjudi atas talian, ataupun (3) sebelum ini sering menggunakan tapak web perjudian sebelum proses kutipan data dijalankan. Perisian IBM SPSS dan SmartPLS digunakan untuk menyemak ciri-ciri data, menguji model penyelidikan secara berempirik, serta menjawab soalan-soalan kajian yang diketengahkan dalam penyelidikan ini. Semua pekali laluan diuji demi menerangkan keteguhan hubung kait di antara setiap kebolehubahan bersandar serta bebas. Dapatan kajian memperlihatkan sokongan utuh dalam 9 daripada 13 hubungan yang diketengahkan, di mana faktor teknologi meninggalkan kesan ketara dalam kebergunaan anggapan dan kemudahan penggunaan yang diamati tetapi sebaliknya tiada kesan dalam niat perlakuan

mengguna. Faktor psikologikal meninggalkan kesan ketara dalam kemudahan penggunaan yang diamati serta niat perlakuan mengguna. Faktor perseorangan pula didapati meninggalkan kesan ketara dalam niat perlakuan mengguna. Dari segi tanggapan asal model TAM, kajian ini mendapati semua hubungan jelas disokong, melainkan kebergunaan anggapan yang tidak menampakkan sebarang impak ketara bersama niat perlakuan mengguna perjudian atas talian. Tambahan pula, kebergunaan anggapan didapati mengantarai hubungan sesama faktor-faktor teknologi serta niat perlakuan mengguna perjudian atas talian. Sumbangan teori kajian ini adalah dalam bentuk sebuah rekacipta model serba komprehensif yang menyepadukan hubungan di antara TAM dan perlanjutan tambahan untuk mencerminkan konteks perjudian atas talian. Dari segi perkaedahan pula, kajian ini mempergunakan teknik gandingan SEM dan PLS untuk menganalisa konstruk peringkat atasan bersama model pemerhatian-pembentukan. Secara praktikal, tidak kira sama ada perjudian di Thailand adalah sah di sisi undang-undang di hari muka, dapatan penyelidikan ini amat bermanfaat pada kedua-dua pihak kerajaan serta pembekal perkhidmatan perjudian atas talian kerana kajian ini telah berjaya menyumbangkan maklumat berkenaan pengaruh dalam perjudian atas talian di Thailand.

FACTORS INFLUENCING ONLINE GAMBLING ACCEPTANCE AMONG THAI UNDERGRADUATE STUDENTS

ABSTRACT

Despite the growing of online gambling, there has been insufficient knowledge that focus on factors that lead to individual behavioral intention to use the Internet for gambling, especially among Thai youth. To fill this gap, this study aims to examine the factors that have impacts on Thai undergraduate students' behaviour. Thus, the technological, psychological, and personal factors will be used to create a comprehensive model of TAM (Technology Acceptance Model) to explain why Thai undergraduate students tend to gamble online. In this study, 202 respondents took part in the survey. The respondents consisted of Thai undergraduate students who were studying in Thailand. The research data were collected by using an online survey form from participants who 1) knew online gambling, 2) had or used to have an experience with online gambling, or 3) who had been using gambling websites before the data collection. The IBM SPSS and SmartPLS were employed to check the nature of the data, empirically test the research model, and answer the research questions of this study. All path coefficients were tested to help explain the strength of the connection between each dependent and independent variable. According to the results, 9 of 13 relationships were supported in this study. Technological factor had a significant effect on perceived usefulness and perceived ease of use, but not behavioral intention to use. Psychological factor had a significant effect on both perceived ease of use and behavioral intention to use. Personal factor had a significant effect on behavioral intention to use. In terms of the perceived of original TAM model, this study found that all relationships are supported, except for perceived ease of use which has no

significant effect with behavioral intention to use online gambling. Furthermore, perceived usefulness was found to mediate the relationship between technological factors and behavioral intention to use online gambling. Theoretically, this study has contributed by develop a comprehensive model that integrates the relationship between TAM and the additional extension to better reflect the Internet gambling context. Methodologically, this current study uses SEM technique with PLS to analyse the higher order construct with reflective-formative model. Practically, the findings from this research study are beneficial for both the government and gambling service providers, whether gambling in Thailand is legal or illegal in the future because this study provides useful information about the influences of online gambling in Thailand.

CHAPTER 1

INTRODUCTION OF THE STUDY

1.1   Background of the Study

Gambling is an activity involving wagers of money or other valuables in a game of randomness. Most gambling events involve taking risky action, and some also require a particular set of skills and knowledge. The gambler may win or lose their money through gambling almost instantly, in games such as those involving a single roll of dice or roulette, while other games take longer, such as sports betting, which predicts the outcome of sports events (National Research Council, 1999).

The internet is a form of technology that has transformed how things are done around the world. Internet users can access the network to receive information and services from any place at any time. This leads people to change their lifestyles and the way they communicate with the advent of new media and e-commerce. Therefore, the birth of the internet also brought about new ways in which gambling could be performed (Nebel, 2012). Since its emergence, internet gambling has become a highly prominent activity all over the world, and continues to be a business with impressive development.

Online gambling is any activity in which a user places a wager or bet using the internet (Online Gambling, 2009), not only on a personal computer, but also on cell phones and some other remote devices which can access the internet (Gainsbury & Wood, 2011). The first attempt to use the internet for such wagers by the general public involved the purchase of online lottery tickets for the international lottery in Liechtenstein, which took place on October 7, 1995 (Romney, 1995).

After that event, the gambling business seemed to acknowledge the opportunities on the internet, as they started to offer betting through their websites. In 1995, The first internet betting site to be published contained an online version of their traditional gambling games (Williams & Seteroff, 2009). In 1996, there were just 15 sites for internet betting (Online Gambling, 2009). However, that number expanded to 2,679 sites by 2010 (Spectrum Gaming Group, 2010) and has continued to expand ever since. This dramatic increase in the number of available sites was due to the increasing popularity of internet gambling. As more and more people became aware of the possibilities of internet gambling, the industry boomed. The increasing availability of internet access and the growth of the online gambling industry also fueled its growth.

The popularity of online gambling is growing rapidly; including market shared and gambling categories their offered. In 2013, the value of online gambling in global market was at €6.1 billion. This number is expected annual growth of 10.1% in 2018 (Global Betting and Gaming Consultants, 2011). Moreover, the market shared of online gambling was estimated around 8-10% of global gambling market in 2012, this percentage also appears to be increasing (H2 Gambling Capital, 2013). Internationally, the leading gambling categories is betting (53% of online gambling market), followed by casino (25.4%), poker (14.2%), and bingo (7.4%) (PricewaterhouseCoopers, 2011).

The use of the internet is an integral part of daily activities such as work, study, or relaxation. The high-speed internet connections around the world are clearly the starting point that has dramatically changed the way people gamble. It is not only former gamblers who are able to immediately adapt to the new format, because the gambling service providers, who already know the lifestyles and behaviour of gamblers, have also started to adapt and bring their gambling activities on to a platform

that can allow them to earn more but invest less (Sitthiphol Wiboonthanakul, 2020, Online Gambling, Digital Threats).

Traditional, or offline, gambling is gradually shifting to the online platforms. The gambling industry relies on the internet platform to make its services accessible to a large number of gamblers. Since these services are low-cost and easy to develop, and they are easily accessible to consumers, they have lowered the traditional barriers that lone entrepreneurs used to encounter when entering the market in the past (Rajapathirana and Hui, 2018). The transformation to online gambling help reduce costs for the former business owners of traditional casinos which required a high level of investment in buildings and fittings. On the other side, the customers also save their travel costs, which leads to them being able to play more often. Moreover, the online platform eliminates the restriction on the number of players in one place (Sitthiphol Wiboonthanakul, 2020, Online Gambling, Digital Threats).

1.1.1 Characteristics of Online Gambling

In an era where technology continues to grow, human life is undergoing significant changes in every aspect. Casino gambling, with some limitations, also developed under the advancement of technology. The growth of the online gambling industry comes partly from the increasing development of mobile phone technology, which make it easier for gamblers to reach online gambling websites. Moreover, online payment technology is now becoming very common in society, which makes it much more convenient and much faster to pay via online channels (Sitthiphol Wiboonthanakul, 2020, Online Gambling, Digital Threats).

The new generation of youth is growing up with the proliferation of digital media. As children, they always preferred fun activities such as playing games. Online games in the present day are produced in a way that hides the gambling elements contained within. Although the payout is not in the form of real money, there are many types of games that fully immerse the children of the current generation in the gambling system. Many games that are similar to gambling have lured young people and people of all ages to have fun while persuading and encouraging people to see that there is a chance of winning. This is the beginning that makes young people dream about the chance to get rich if they actually gamble online. Moreover, many online games also insert advertisements for gambling companies (Reform Thailand, 2020, Beware of the Growing Problem of Online Gambling).

Gambling can be classified as a type of entertainment since it provides enjoyment and prizes to the winners. However, the types of risk that people take depend on how they choose to play; some prefer to earn more, which results in higher risks. Therefore, for some people who lose, higher risk-taking behaviour leads to greater frequency and a large loss of money. This danger in many cases can lead to serious financial problems (Puangchompoo, 2013). Moreover, gambling also leads to bankruptcies, violence, increased suicide rates, increased divorce rates, crime, loss of employment, and increased underage youth gambling behaviours (Thrasher et al., 2007).

Online gambling has some attributes that are different from traditional betting. The advantage of gambling online tends to be similar to the advantages of how the internet replaces normal behaviours in everyday life. The internet has changed the gambling business by allowing sports bets to be placed anywhere and at any time (Griffiths, 2007; King et al., 2010). This availability and the convergence of digital

media with broadband internet expansion generates not only gambling opportunities, but youth gambling problems too (Reilly, 2009). The rate of problem gambling among Internet users was three times higher than that among non-Internet users (Gainsbury et al., 2014).

Griffiths (2003) stated that the advancement of technology can have an impact on the development of gambling behaviour and the examination of these characteristics may pinpoint the role of technology on gambling acquisition, development, and maintenance; both directly and indirectly. Although, traditional casinos and online casinos are similar in terms of game selection, online gambling has many attributes that are different from traditional betting. Online gambling is more accessible, due to its availability at any time and anywhere, as well as its overall convenience. It is also much faster, as players are not restricted to the limited physical space of a casino. Furthermore, online gambling offers more anonymity than traditional casinos, as players do not have to show their faces or share any personal information.

Some research tries to explain the acceptance of online gambling, such as Cooper (1998), who proposed the Triple A Engine, which included Access, Affordability, and Anonymity. Young (1999) also developed the variation of the previous model to the ACE model which included Anonymity, Convenience, and Escape. However, although they provide the main variables of some online behaviours, none of these have been tested further to explain their contribution to online gambling acceptance.

Online gambling is likely to continue growing as long as online platforms are increasingly used in entertainment activities, especially when they are used via smart phones and other wireless devices. The most common advantages of online gambling are convenience and accessibility (McCormack & Griffiths, 2012). Other motivators include affordability, the better payout rates, the speed of online gambling, a variety of gambling types, and the ability to gamble from home.

Shead et al. (2012) discovered that media advertisements for online gambling are targeted directly to college students because, compared to adults, students tend to have significantly greater gambling issues (Thomas, 2013). This is because college students are particularly vulnerable to the persuasive messages, as well as the enticements such as bonuses, that are often used to attract them. Furthermore, the ready access to digital media has made it easier for online gambling companies to target students. The progression of digital media has increased the risk behaviours in teens and youth, for example, sexting, cyberbullying, drinking, game addiction, and online gambling (Brook-Gum & Donahue, 2008).

1.1.2 Online Gambling in Thailand

Online gambling is the fastest growing type and most popular gateway to gambling. According to iGaming Business (2017), the numbers in the gambling industry are expected to exceed 1 trillion US dollars by 2021 (Juniper Research, 2016). Between 2015-1016, Dr. Kittisak Klubdee, an advisor to the Ministry of Public Health, Thailand, stated that more than 213,000 online gambling websites were established (Shock! 7 Years Old Kid Start Gambling, 2018). This is due to the convenience and accessibility of online gambling, as well as the increasing availability of high-speed internet and mobile technology that allows people to gamble from any location. This

has also enabled gambling operators to reach new markets and expand their customer base.

Nearly all types of gambling are illegal in Thailand. Paisarn Limsatit stated via the Gambling Act Proposal (2012) that the gambling laws in Thailand are outdated and unreasonable due to the act having been established in 1935 and having remained unedited since then. For example, there is the case of the strip club and casino in which the court decided to punish the casino owner with just 2 months in jail and a fine of 1,000 baht. This ruling shows that the gambling laws are outdated, as the punishment for such an offense is not even close to being in line with the severity of the crime. This has led to an increase in illegal gambling activities, and it has become increasingly difficult for the government to enforce the laws that are in place.

Although the Thailand gambling act does not directly specify internet gambling, online betting falls under the general category of gambling (Online Gambling Law, 2015). The two special cases that are an exception to the country's ban on gambling are the national lottery and wagering on horse races at a small number of racetracks (Puangchompoo, 2013). Other than that, the whole nation is a no-betting zone. However, gambling is still big business in Thailand. Many surveys have found that about 60% of Thais take part in some type of betting, sports gambling, or poker. A survey in 2014 showed that about 43 billion baht was wagered on the World Cup alone in Thailand (Online Gambling Law, 2015). Jitthum (2009) stated in his research that most of the gamblers in Thailand are students (57.5%), followed by people who run their own business (20.4%). Meanwhile, Lapawattanapan (2013) found that 66.7% of Thai undergraduate students were addicted to gambling because of friends, media, and accessibility. The more they were exposed to media the more they had a positive attitude towards gambling. The Center for Gambling Studies partnered with Stop

Gambling Network to find that there are 820,000 people participating in online gambling with 20,152 million baht spent. The most addicted are the youth with an age range of 15-25 years old with 95.3% gambling via their smartphone (Center for Gambling Studies, 2019).

In Thailand, Wongsamuth (2014) published an article about online gambling in the country, stating that football betting has increased at an alarming rate since it was introduced to Thailand at the end of the last century, and punters are getting younger. Although 80% of football gambling in Thailand currently involves betting through agents, academics predict this will soon switch entirely to online gambling. As the gambling industry is growing, it is necessary to understand the factors contributing to its growth.

Dr. Kittisak Klubdee, an advisor of the Ministry of Public Health, stated via "Shock! 7 Years Old Kid Start Gambling" (2018) that more than 213,000 online gambling websites were established between 2015-2016 with most of their servers located beyond the borders of Thailand, which makes them almost impossible to control. This lack of control allows these websites to flaunt the country's laws and regulations, as well as create a platform for underage gambling. Being located outside of the country makes it extremely difficult to monitor and police these activities, leading to an increase in gambling-related problems.

Youths are prone to gambling addiction as they can easily access gambling websites by mobile phone, tablet, or personal computer. Gambling is hidden in the daily activities of young people. The lifestyles in the digital age, where daily activities are carried out through online channels, often lack security and control from the relevant authorities. As a result, youths are more likely to become addicted to gambling

as it is easier and more accessible than ever before. They are also more likely to be exposed to gambling advertisements and promotions which can add to the temptation and further increase the risk of developing an addiction. In other countries, where gambling is legal, gamblers should be aged 21 or older. However, in Thailand, even 13-year-olds can open an account. Therefore, when there are no real age restrictions, the gambling problem will spread widely among the youth (Reform Thailand, 2020, Beware of the Growing Problem of Online Gambling).

1.2 Problem Statement

Although it is generally acknowledged that land-based gambling, particularly Electronic Gambling Machines (EGMs), causes the greatest harm to communities (Productivity Commission, 2010), policy makers and public health practitioners have increasingly focused their attention on online gambling opportunities (Parliamentary Joint Select Committee on Gambling Reform, 2011; Thomas et al., 2012). Several researchers have raised concerns about internet technologies' ubiquitous nature, and how it may generate greater exposure and accessibility of gambling products, increasing risk and prevalence (Thomas et al., 2012).

The issue of online gambling is noticeable in recent years. The emergence of online gambling casinos has brought changes to people's gambling behaviour. The impact of technological factors on online gambling acceptance has been mentioned in many studies. Previous research suggests the significance of the following characteristics of online gambling such as accessibility (Griffiths, 1999; Griffiths, 2003; Manzin & Biloslavo, 2008; Deans et al., 2016), affordability (Griffiths, 2003; Manzin & Biloslavo, 2008; Danes et al., 2016), anonymity (Young et al., 1999; Griffiths, 2003; Wood et al., 2007; Manzin & Biloslavo, 2008; Gainsbury et al., 2012),

convenience (Griffiths, 2003; Wood et al., 2007; Hing et al., 2015; Danes et al., 2016), and simulation (Griffiths, 2003; Wood et al., 2007; Gainsbury et al., 2017; Kristiansen et al., 2018). These factors make online gambling stand out and provide an advantage over the traditional casino.

A further search of the literature shows that not only the technological side of online gambling affects online gambling acceptance, but also the psychological factors. Stanley (2015) suggested about the escape factor that online sports gambling is a convenient way to escape from stress. Purdie et al. (2011) also stated that the most common motivation behind youth gambling is enjoyment. Moreover, Konietzny et al. (2018) stated that perceived fairness is an important consideration for gamblers when choosing an online casino. Although escape, enjoyment, and fairness are not the factors that come with the advancement of technology, they are, however, factors that are also worthy of consideration.

Various studies show that some personal factors may influence gambling behaviour as there are certain populations that may be at higher risk than others. Based on the literature, family involvement and alcohol consumption are commonly found as personal factors that are related to gambling behaviour. Valentine (2008) stated that the attitude and behaviour of their family members may have a strong influence on youth, with some parents even assisting their children to gamble. Moreover, family members may act as role models and provide positive reinforcement for gambling behaviour, which can lead to increased involvement in gambling activities. Meanwhile, Griffiths et al. (2009) stated that past research has identified a strong relationship between alcohol use and gambling. Alcohol consumption has been found to reduce an individual's inhibitions and impair their judgment, which can lead to increased risk-taking and impulsive behaviour, including gambling.

As the gambling market is shifting towards the internet due to its advantages over traditional gambling, this study would like to expand the knowledge of online gambling, and especially of the factors that can lead to the acceptance of online gambling websites among Thai undergraduate students. Although adolescents are an emerging market for the gambling industry with great purchasing potential, there are still limitations that require further studies examining online gambling, especially in Thailand.

Firstly, most of the above existing studies have tried to understand the phenomenon of online gambling by focusing on factors individually. Few studies have sought to examine these multiple factors together in a single study. To fill this gap, this current study extends the past research by examining various possible factors. The technological factors consist of accessibility (Griffiths, 1999; Griffiths, 2003; Manzin & Biloslavo, 2008; Deans et al., 2016), affordability (Griffiths, 2003; Manzin & Biloslavo, 2008; Danes et al., 2016), anonymity (Young et al., 1999; Griffiths, 2003; Wood et al., 2007; Manzin & Biloslavo, 2008; Gainsbury et al., 2012), convenience (Griffiths, 2003; Wood et al., 2007; Hing et al., 2015; Danes et al., 2016), and simulation (Griffiths, 2003; Wood et al., 2007; Gainsbury et al., 2017; Kristiansen et al., 2018). Psychological factors consist of escape (Stanley, 2015), perceived enjoyment (Purdie et al., 2011), and perceived fairness (Konietzny et al., 2018). Personal factors consist of family involvement (Valentine, 2008), and alcohol consumption (Griffiths et al., 2009). These factors are considered in order to test online gambling acceptance to better understand online gambling behaviour.

Second, prior studies lack the theoretical frameworks and comprehensive models that expand the understanding of online gambling. Some studies have developed research models regarding the relationships between factors and online

gambling behaviours, but the factors are narrow (Konietzny et al., 2018; Procter et al., 2019). The Technology Acceptance Model is a theory that is used to determine the predictions on how people choose whether to accept technology and the internet, and this approach has been successfully applied in many studies of internet technology. The model has been used in many studies about examining technology acceptance behaviour with 50,821 citations for the original articles of Davis introducing TAM in Google Scholar. There are many analyses of TAM studies that show that additional factors can be added to TAM to improve the model's predictive validity (Marangunić & Granić, 2015). Some research tries to develop a more complete version of TAM to help address the internet in a different context by adding extensions to the TAM base model. Even though TAM has been tested widely with different samples in different situations and has proved to be a valid and reliable model explaining information system acceptance and use, TAM has not been used much in the context of online gambling websites. This study, unlike most others, integrates TAM with three main factors to explain the factors that lead to online gambling acceptance. We need to research this topic to expand our knowledge of online gambling.

Thirdly, most studies treated the factors individually. Moreover, the use of a higher-order construct for data analysis is rare in past research. There is no study on online gambling that used Structural Equation Modelling (SEM) to test the relationships, and none of the prior studies tested variables as higher-order constructs. This study consists of three higher-order constructs: 1) technological factors are formed by accessibility, affordability, anonymity, convenience, and simulation; 2) psychological factors are formed by escape, perceived enjoyment, and perceived fairness, and 3) personal factors are formed by family involvement, and alcohol consumption. All of these factors, combined with the technology acceptance model,

will be used to test the relationship between each factor and their influence on online gambling acceptance.

Finally, a limitation from many past studies that can be observed is the lack of research from Thailand. Insufficient research has been conducted on the topic of online gambling, although there is no doubt that online gambling is growing rapidly in Thailand. According to Konietzny et al. (2018), there is still relatively limited academic literature on gambling, especially on marketing and consumer behaviour. The results can be different depending on countries, types of technology, or various target groups (Park et al., 2012). According to Kuciapski (2017), different countries mean different ways of thinking, which is highly noticeable for Asian and European users. He gave an example of mobile games which are popular in China, Japan, and South Korea rather than in Europe. The same goes for mobile TV, which is popular in Japan and South Korea. In contrast, people in Finland do not use these services much and this results in low acceptance of mobile TV and a failure to adopt. Nassuora (2013) stated that the acceptance and adoption of technology is not the same in every country, and researchers need to investigate them specifically. Moreover, according to Venkatesh and Davis (2000), the perceptions change over time as people gain experience.

Hence, this current study addressed research gaps found in past studies on online gambling by examining multiple factors together in a single study, developing a comprehensive technology acceptance model, using the higher-order construct for SEM data analysis, in the Thailand setting.

1.3 Research Questions

From the background of the study and problem statement, the following research questions should be investigated:

1. What is the role technological factors have in the acceptance of online gambling platforms among Thai undergraduate students?

2. What is the role psychological factors have in the acceptance of online gambling platforms among Thai undergraduate students?

3. What is the role personal factors have in the acceptance of online gambling platforms among Thai undergraduate students?

4. What is the role technology acceptance model factors have in the acceptance of online gambling platforms among Thai undergraduate students?

5. Does perceived usefulness and perceived ease of use facilitate the relationship between factors predicting the acceptance of online gambling platforms among Thai undergraduate students?

1.4 Objectives of the Study

This study aims to examine the factors driving online gambling among Thai undergraduate students. From the research question, the detailed objectives are outlined as follows:

1. To examine the role technological factors have in the acceptance of online gambling platforms among Thai undergraduate students.

2. To examine the role psychological factors have in the acceptance of online gambling platforms among Thai undergraduate students.

3. To examine the role personal factors have in the acceptance of online gambling platforms among Thai undergraduate students.

4. To examine the role technology acceptance model factors have in the acceptance of online gambling platforms among Thai undergraduate students.

5. To examine the role of perceived usefulness and perceived ease of use have in mediating the effect of factors predicting the acceptance of online gambling platforms among Thai undergraduate students.

1.5   Significance of the Study

With internet innovation, a college student might be at risk of losing focus and becoming involved with cultural norms that will not help in their graduation and their life after college (Lee et al., 2008) and students are not going to raise the issue of problem gambling on their own, especially when gambling among students is seen as a harmless activity and as something to be used for immediate financial gain (Stanley, 2015). This is because internet gambling can become a distraction and can cause students to be more focused on the potential rewards rather than their studies. When left unchecked, gambling can become an addiction which can lead to devastating financial and mental health consequences. Additionally, the social acceptance of gambling can lead to more students engaging in it, which can further distract them from their studies.

Recently, the quantity of research into online gambling has been continually growing, yet, there are limited studies that demonstrate which factors could motivate individuals to accept online gambling platforms. Despite the issue of problem gambling in recent decades, there has been insufficient research into the acceptance of

online gambling platforms. Furthermore, the stigma around problem gambling has made it difficult for researchers to gain access to individuals who have experienced problem gambling in order to gain a better understanding of why people accept online gambling platforms.

Although the public has increased their level of gambling awareness, through information on online gambling from a global point of view, the evidence based on Thailand, especially in Thai youth, is minimal. As a result, this study, which focuses on the context of Thai undergraduate students, investigates the acceptance of online gambling platforms. The study is significant in three ways including theoretical, methodological, and practical.

1.5.1 Contribution to Theory

Theoretically, this study combines the theory acceptance model and applies the extension to developing a comprehensive model of online gambling. Although TAM proved to be a valid and reliable model to explain the acceptance of technology, only a limited number of studies used TAM as part of the research model in the context of online gambling websites. Therefore, this research is significant because it models the role of each factor in the acceptance of online gambling platforms. This model will help broaden knowledge of the acceptance of online gambling.

Unlike most previous studies, which normally focus on each factor separately, this research brought together accessibility, affordability, anonymity, convenience, simulation, escape, perceived enjoyment, perceived fairness, family involvement, and alcohol consumption to test online gambling acceptance to better understand online gambling behaviour. No past study has combined all of these factors in a single research model.

Moreover, this study groups online gambling factors that influence online gambling acceptance into three groups: technological factors (accessibility, affordability, anonymity, convenience, and simulation); psychological factors (escape, perceived enjoyment, and perceived fairness), and personal factors (family involvement, and alcohol consumption). In many research studies, technological, psychological, and personal factors have only been investigated individually. However, this study is going to investigate them as combined factors in one model. The model should develop the direction to address the problem of individual behavioral intention to use the internet for gambling.

1.5.2 Contribution to Method

Methodologically, most of the prior studies on online gambling are exploratory or qualitative research instead of the development of a model followed by its empirical testing (Deans et al., 2016). Moreover, most of them typically employed regression analysis to identify the variables of online gambling behaviours (Edgren et al., 2017; Konietzny et al., 2018). However, this study used structural equation modelling with partial least squares to analyze the online gambling acceptance model. The study created a comprehensive model that determines the factors influencing the acceptance of online gambling platforms. The use of structural equation modelling method allowed the study to identify the underlying relationships between the factors of online gambling acceptance. The partial least squares method also allowed the study to examine indirect effects among the variables. Furthermore, it also used higher-order construct analysis, which has been used less frequently in prior studies.

As insufficient quantitative research has been done on the topic of online gambling, the operationalization of variables in this current study is expected to bring a greater contribution to future online gambling research. Although this study mostly uses research question items that are taken from prior studies of online gambling or different technology acceptance research, the operationalization of variables in this study should fill the gap of the lack of research investigating extensions of the theory acceptance model in the online gambling context.

1.5.3 Contribution to Practitioners

Practically, online gambling is becoming a significant concern for society and this research should raise awareness of online gambling by provide information on gambling among Thailand's youth, and help identify the characteristics of Thai undergraduates who participate in online gambling. Furthermore, this research should lead to more knowledge about the motivations that lead to online gambling. The explanation of factors that lead to the acceptance of online gambling among Thai undergraduate students should help us monitor and prevent gambling problems in the near future. The convergence of digital media and gambling leads to more gambling opportunities and more college students developing gambling problems. Therefore, the findings of this study should give guidelines to protect against the dangers of online gambling.

By understanding why college students are more likely to engage in online gambling, the government can work to reduce the number of students gambling online by targeting risk factors and helping those at risk. The government can also create policies and regulations that make it harder for students to access online gambling platforms, as well as provide resources to students who are struggling with gambling

addiction. Furthermore, by educating students on the potential risks of gambling, the government can help them make more informed decisions and reduce their chances of developing gambling problems.

1.6   Scope of Study

Insufficient research has been done on the topic of online gambling, even though there is no doubt that online gambling is growing rapidly in Thailand, especially among the youth (Center for Gambling Studies, 2019). As a result, this study mainly focused on undergraduate students. Participants with other occupations may bring about different data and findings. In addition, the participants in this study included only students from a university located in Thailand because there are limited studies that have been carried out in the Thai context. Participants across different countries may bring about different data and findings. Therefore, it is important to note that the results of this study can only be applied to a specific population and context.

The study investigates the factors that lead to the acceptance of online gambling among Thai undergraduate students. The study mainly focused on TAM theoretical perspectives with three groups of factors including technological factors (accessibility, affordability, anonymity, convenience, and simulation), psychological factors (escape, perceived enjoyment, and perceived fairness), and personal factors (family involvement, and alcohol consumption). The theory and these factors were used to construct a model to test the acceptance of online gambling platforms in general. The other factors that may affect the acceptance of online gambling that are not included in this study research's model are not investigated.

Additionally, the duration of the study was limited to a one-year period. A longer period of study might bring about a different result.

CHAPTER 2

LITERATURE REVIEW & THEORETICAL FRAMEWORK

2.1   Introduction

This chapter presents the literature review and theoretical framework of the study. The researcher begins by providing the information about online gambling as an overview and specifically in Thailand. This is followed by a discussion of the theoretical perspective of the study including TAM and the factors that lead to this research model. The development the of theoretical framework and hypotheses is proposed at the end of this chapter after the review of past studies and theory.

2.2   Online Gambling: Overview

According to the National Research Council (1999), gambling is a game of chance that involves a monetary wager. Most of the gambling events involve taking risky action and require a particular set of skills and knowledge. Some games can be won or lost immediately, such as games that involve a single roll of the dice, or roulette. In contrast, some games may take longer, such as sports betting or lotteries. Gambling involves the anticipation of outcomes, usually based on a combination of luck, skill, and knowledge. Each game has its own set of rules and strategies, and players must understand them in order to maximize their chances of winning.

In 1991, Tim Berners-Lee, a British computer scientist, invented the "internet" which allowed communication between computers via the World Wide Web (The Invention of the Internet, 2010). After that, use of the internet has rapidly grown around the world and become one important factor in developing countries. The online aspect can be used by any device such as computer, tablet, or smartphone that has an

internet connection. Therefore, the internet gave birth to a new way to gambling as consumers can participate in gambling activities remotely (Nebel, 2012).

According to Wood and Williams (2009), the expansion of internet technology has transformed land-based gambling to an electronic format. Traditional gambling such as casino games, slot machines, bingo, lotteries, sports wagering, horse race betting, and skill games are available to play virtually. Moreover, with the advantage of the internet, new forms of gambling are also continually added to the list. The users can place a wager or bet directly using the internet (Online Gambling, 2009), not only on a personal computer, but also on cell phones and some other remote devices which have internet access (Gainsbury & Wood, 2011). Nebel (2012) also stated that the internet has set a new standard on how gamblers can bet and wager money on their gambling choice. This new way of gambling has made it more accessible to people from all over the world as they can now participate in gambling activities without having to leave their homes. Furthermore, online gambling has also made it easier for people to set up their own gambling sites, which has further contributed to the global spread of gambling.

The rapid growth of internet availability and accessibility has massively transformed the gambling market. Thomas (2013) stated that two major changes are, first of all, the growth of the internet leading to more opportunities and new ways to gamble, and, secondly, the gambling industry expanding their betting to micro-bets where gamblers can wager money on sporting action as it takes place in real time, such as who will take the kick-off, or score the first goal. Palmer (2014) indicated that since bookmakers started taking bets over the telephone and internet, sports betting has changed. Sports gambling shifted to an online platform with the help of the internet and smartphone technologies. The characteristics of betting changed from just placing

a bet on the end result to "micro-betting" which allows the gambler to place a bet on events that happen during the game in real time. Humphreys and Soebbing (2013) are also confident in expecting a tidal wave of online sports gambling over the next 5 to 10 years because of accessibility to gambling, and this will lead to more problematic gamblers. The ease of access that online gambling provides makes it easier for people to become problem gamblers, as they can access it from the comfort of their own home. Additionally, the availability of micro-betting allows people to bet on multiple outcomes at once, which can lead to more losses and more risk of becoming a problem gambler.

Multiple forms of gambling are becoming increasingly available to individuals, whether they play in a land-based or online setting. The rapid increase in gambling options can be attributed to several factors, including government policies aiming to stimulate tourism, leisure, and entertainment (Korn, 2000); global platforms for internet-based gambling have become available with the advent of new technologies (Olason et al., 2011); and the ease with which gambling can be used to generate revenue by governments, including hypothecated taxation (Pickernell et al., 2004). Additionally, gambling has been made more accessible to the public with the proliferation of gaming machines and casinos, as well as the widespread availability of online gambling platforms. This has created an environment where it is easier for people to gamble than ever before.

Research by Ranade et al. (2006) shows the top three forms of online gambling as follows: casinos (55%), sports and events betting (43%), and lotteries (2%).

Figure 2.1

Top 3 of Internet Gambling

Top 3 of Internet Gambling

- Casinos
- Sports and Events betting
- Lotteries
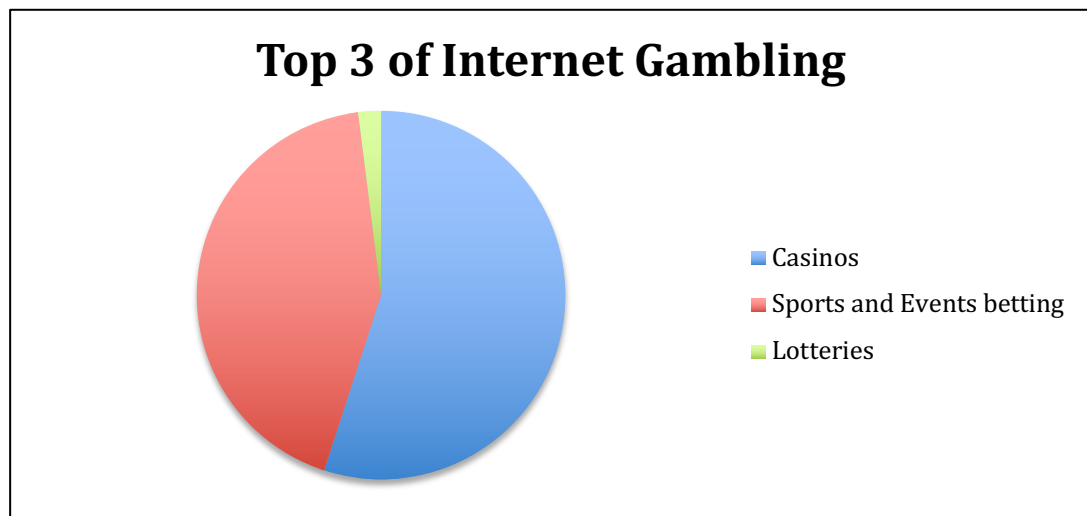
Today, the gambling industry is growing across the globe. The market size of the industry in each country is different. There are a variety of factors that influence the size of the gambling industry in each country, such as the legal framework, taxation policies, and social attitudes towards gambling. These factors can vary significantly from one country to another, which explains why the market size of the industry can be different. Below are summaries of the key markets for internet gambling (Ranade et al., 2006).

Table 2.1

Summaries on the key markets of internet gambling

Zone	Description
USA	The largest individual national market for online gambling with 4 million regular internet gamblers and approximately 1,900 US dollars spent per gambler per year.
Asia-Pacific	Although gambling is illegal for the most part, this region is large and fast-growing, with 7 million regular internet gamblers with 2,300 US dollars spent per gambler per year.
Europe	High income and internet availability make this a key region for the growth of internet gambling in the long term, with 3.3 million regular internet gamblers (0.9 million in the UK alone) with 1,800 US dollars spent per gambler per year.

Ranade et al. (2006) also explained the reason for the growing numbers of gamblers in the USA and UK. First, potential customers can discover internet gambling easily by using a search engine or through advertisements on other websites. Second, internet availability is easy to access. Finally, the number of women gambling via the internet is also growing.

2.3   Gambling in Youth

Today's college students are born to be part of the information age. Hume and Mort (2011) described internet technology and interactive devices as a necessity of college students' lifestyles. The main elements of college students' modern lifestyles have been changed from the past. Texting, tweeting, instant messaging, and social networking are the primary social interactions. It has made it easier to collaborate with peers and access to digital tools has become more accessible. As a result, college students are able to take advantage of these resources more efficiently and effectively.