

# Drivers of Recreational Online Gambling Intentions: A UTAUT 2 Perspective, Enhancements, Results, and Implications

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## Abstract

Recreational gambling has become an accepted pursuit, and the advent of the Internet has rendered online gambling ubiquitous. However, the resultant rapid growth in online recreational gambling is not matched by an understanding of the drivers of customers' intentions to gamble online. While this is potentially a fascinating aspect of consumer behavior, marketing scholars have shied away from giving online gambling much attention. This research seeks a better understanding of the drivers of recreational online gambling intentions among customers by applying the latest version of the Unified Theory of Acceptance and Technology—UTAUT 2, to customers in an online gambling context. It also proposes additional hypotheses that account for the role of anticipated enjoyment and perceived fairness. Data are collected from 593 casino customers of an online gambling firm and analyzed using PLS-SEM via Smart PLS. Results show that perceived fairness and anticipated enjoyment are significant drivers of online gambling intention, with perceived fairness being fully mediated by effort expectancy, anticipated enjoyment, and social influence. Shorn of drivers and moderators that are not significant, an online gambling intention model is proposed. Theoretical and managerial implications are discussed, limitations are noted, and areas for further research are suggested.

**Keywords:** gambling intentions, marketing, online gambling, PLS-SEM, UTAUT 2

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## Introduction

Gambling has been around for hundreds, possibly thousands, of years, and is arguably one of the oldest forms of entertainment (Reith, 2002). It has been frowned upon, exploited as a source of state revenue, and at times it has been severely

restricted or completely prohibited (Binde, 2005, 2007a; Reith, 2002). In recent years, it has become a more acceptable form of recreation. Certain persons may spend their money on going to the theatre or the cinema; others prefer to play games of chance (Binde, 2005).

The land-based gambling sector is maturing (Mizerski, 2013) and moving into the online sphere (e.g., Gaming Innovation Group, 2019; Hard Rock International, 2018), with revenues for online recreational gambling expected to more than double, from about \$US 46 billion in 2019 to \$US 94 billion in 2024 (Statista.com, 2019). The Internet has allowed the gambling industry to diminish the importance of location, and today customers can pick and choose from thousands of websites (Casino City, 2019). There is no longer a need for customers to travel to a casino, betting shop or race circuit to play a table game, slot machine or to place a bet. It can all be done from the comfort of an Internet-enabled device and at any convenient time. Location only remains important at a macro level as any online gambling operator needs to be licensed from authorities in a reputable jurisdiction.

Behavioral economics, psychiatry and psychology have all sought to understand gambling behavior. Behavioral economics provides expected utility theory (von Neumann & Morgenstern, 1944) and prospect theory (Kahneman et al., 2012). However, despite the superiority of the latter, it remains predominantly an explanatory choice theory (Van de Kaa, 2008). In both psychiatry and psychology, the principal concern has been on problem gambling as a disorder involving “the frequent, and often long-term, pattern of ‘chasing’ one’s losses” (American Psychiatric Association, 2013, p. 586). Therefore, compulsive gambling behavior and related issues, including health, have received overwhelming attention in psychology (e.g., Calado & Griffiths, 2016; Gainsbury et al., 2014).

Notwithstanding, psychology has also paid attention to land-based gambling behavior and the decision to gamble. The motivations considered have included risk-taking and excitement (Csikszentmihalyi, 1990; Zuckerman, 1994), sensation-seeking (Mishra et al., 2010; Zuckerman, 2007), the associated glamour lifestyles as portrayed in films and invoked by advertising (Sklar & Derevensky, 2010), as well as escapism from loneliness or boredom (Blaszczynski & Nower, 2002; Rockloff et al., 2011; Rockloff & Dyer, 2006). Gambling has also been seen as an intellectual challenge, especially in games where a level of skill is involved (e.g., poker), and of course as a chance of winning money (Binde, 2013).

Despite the size of the industry, recreational gambling, whether land-based or online, has received minimal attention in business and marketing. The lingering stigma of gambling addiction may have possibly conditioned the willingness of business and marketing researchers to tackle the subject. Indeed, there exists only a limited number of studies that have explored various forms of gambling from a business or marketing perspective (e.g., Cummings & Corney, 1987; Moore & Ohtsuka, 1997, 1999; Oh & Hsu, 2001). This lacuna is especially astounding given just how much money, time and effort are devoted to online recreational gambling in so many

countries, and by so many consumers (Mizerski et al., 2013). Online recreational gambling is increasingly being viewed as a normal leisure activity which in itself is a fascinating aspect of consumer behavior and marketing that is worthy of attention. Therefore, this research looks at recreational gamblers and seeks to identify: “What are the drivers of online gambling intention?”

To address this question, the study extends the latest iteration of the Unified Theory of Acceptance and Use of Technology (UTAUT 2) by Venkatesh and colleagues (2012) to the online gambling context. The study further recognizes that other additional drivers are indicated in the literature, ones that can impact customers’ intention to engage in online recreational gambling: besides winning money, both fun and enjoyment are important motivators (McCormack et al., 2014; Nower & Blaszczynski, 2010) while fairness has been a concern for both online recreational gamblers and regulators. Online recreational gamblers are known to complain about unfair promotions or bonuses, late payouts of winnings or unfair treatment by customer service representatives (e.g., AskGamblers.com, 2019; “Beeswax,” 2018; Davidovic, 2015; Mitrovic, 2019; “PetraPool,” 2019) whereas regulators have sought to regulate unfair practices (e.g., Ahmed & Megaw, 2016; BBC, 2018; UKGC, 2017a, 2017b, 2018a, 2018c). Therefore, model enhancements are proposed to UTAUT 2 that incorporate hypotheses accounting for the role of anticipated enjoyment and perceived fairness on gambling intention. The proposed enhanced model is contrasted with the original UTAUT 2 model and results are used to propose a model of recreational online gambling behavior among customers. To investigate the models, the researchers collect data from 593 casino customers of an online gambling firm, and analyses using PLS-SEM via Smart PLS (Ringle et al., 2015) are undertaken. Results are reported, implications are discussed, limitations are noted, and possible areas for further research are indicated.

### **Literature review**

An understanding of buyer behavior intentions is an essential prerequisite for effective marketing. It is, therefore, not surprising that the study of intentions has a long tradition in marketing. Several theories have been developed with the Theory of Reasoned Action—TRA (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and its elaboration in the Theory of Planned Behavior—TPB (Ajzen, 1985) being among the ones that are better known. In the context of Information Systems (IS), the emphasis on behavior intentions has primarily been to understand employees’ acceptance and use of information technology. As a result, elaborations of TRA and TPB have been proposed that include: the Technology Acceptance Model—TAM (Davis, 1985) together with extensions, e.g., TAM 2 (Venkatesh & Davis, 2000), hybrids, e.g., Combined TAM and TPB (Taylor & Todd, 1995) and syntheses in the form of the Unified Theory of Acceptance and Technology—UTAUT (Venkatesh et al., 2003). UTAUT was intended for an IS context with a focus on technology users but has subsequently been elaborated as UTAUT 2 and claimed to be relevant to a consumer context (Venkatesh et al., 2012; 2018). Given the technological reliance of online recreational gambling, it is proposed that UTAUT 2 can be elaborated to better

understand the drivers of online betting intentions among customers. This knowledge can ultimately provide managers with better indications for effective marketing.

### *UTAUT to UTAUT 2*

In an attempt to synthesize eight of the most prevalent models in information systems science, Venkatesh and colleagues (2003) developed UTAUT, focusing on employees using internal IT systems. The UTAUT model identifies three key drivers of behavior intention, namely (1) performance expectancy, (2) effort expectancy and (3) social influence (with facilitating conditions impacting use behavior directly); together with four moderating variables: (1) gender, (2) age, (3) experience, and (4) voluntariness of use. Performance and effort expectancy largely derive from perceived usefulness (PU) and perceived ease of use (PEoU) respectively, as encompassed in TAM and its extensions. Social influence (alternatively also described as subjective norm, social factors and image—cf., Venkatesh et al., 2003, p. 451) captures how much users are influenced by the opinion of others about whether they should use a system while facilitating conditions refer to whether users believe that there is the organizational or structural support for using the new technology. Venkatesh et al. (2003) did not include attitude towards using technology in their UTAUT model—a construct previously proposed by others and incorporated in certain of the earlier models. They acknowledge that certain studies have found attitude, affect or intrinsic motivation to be significant antecedents of behavior (e.g., Davis et al., 1992; Venkatesh & Davis, 2000), but argue that these are not significant predictors of behavioral intention and that these are being captured by effort and performance expectancy. Venkatesh and colleagues (2003) tested and validated their model in four different industries and reported that it outperformed all other models tested, explaining 70 percent of the variance in behavioral intention.

Luo and Remus (2014) point out that in their UTAUT model, Venkatesh and colleagues (2003) investigate organizations and employee behavior for technology acceptance rather than looking at technology acceptance among external customers who use the technology to make an online purchase. Indeed, the various early studies, together with the orientation of the UTAUT model, were directed towards utilitarian systems that seek improvement in employee performance. However, the roots of the UTAUT are TRA and TPB, both of which are very much customer rather than employee focused. Certainly, later literature provides certain limited evidence of the use of UTAUT to explain the technology use intentions of customers rather than employees. These include studies that have looked at (1) mobile technology products (e.g., Carlsson et al., 2006; Martins et al., 2014; Min et al., 2008; Saeed, 2011), (2) banking services (Bankole et al., 2017; Im et al., 2011), (3) social media (Borrero et al., 2014; Lallmahomed et al., 2013; Liew et al., 2014), (4) e-government services (Chan et al., 2010; Venkatesh et al., 2011) and (5) e-learning (e.g., Chiu & Wang, 2008; Tan, 2013). In addition, both Chiu et al. (2012) and Konietzny and Caruana (2019) use a modified UTAUT when looking at online lottery adoption and online gambling respectively.

Venkatesh and colleagues' (2012) revision of the original UTAUT to propose UTAUT 2 sought to extend the model away from organizations and technology acceptance by employees to behavior intention of customers of technological products. To enhance the suitability of their proposed UTAUT 2 model, the researchers added hedonic motivation, price value, and habit as additional drivers to behavior intention. First, hedonic motivation is defined as “the fun or pleasure derived from using a technology” (Venkatesh et al., 2012, p. 161) and is equivalent to perceived enjoyment in IS research. Second, the price value concept represents the “cognitive trade-off between the perceived benefits of the application and its monetary costs” (Venkatesh et al., 2012, p. 161). The inclusion of the price value construct acknowledges that, unlike employees who are not liable for the cost of purchasing a system, customers bear the price when purchasing a product or service. Finally, habit is defined as “prior behavior [... and] the extent to which an individual believes the behavior to be automatic” (Venkatesh et al. 2012, p. 161). Habit has been added because the authors argue that the role of habit on behavior intention has been highlighted as a predictor of technology use in the IS literature.

Besides the addition of these three additional drivers of behavior intention, three other changes have been made in UTAUT 2. First, facilitating conditions is modeled as also impacting behavior intention while in UTAUT, this only impacted use behavior. Second, voluntariness of use no longer features in the model. Third, the moderating effects of age, gender and experience have been extended to the three new drivers of behavior intention described, namely: hedonic motivation, price value, and habit; while experience now also moderates the link between behavioral intention and use behavior. The authors survey mobile Internet customers and conclude that the extensions proposed in UTAUT 2 produced an improvement in the variance explained in behavior intention which was reported to have increased from 56 percent to 74 percent (Venkatesh et al., 2012). No study appears to have employed UTAUT 2 to investigate recreational online gambling intentions among customers.

### *Enhancements to UTAUT 2*

This research proposes the use of UTAUT 2 and the addition of anticipated enjoyment and perceived fairness as possible enhancements to investigate the drivers of betting intention in a recreational online gambling context.

### **Anticipated Enjoyment**

The hedonic aspects of consumption and the significance of enjoyment, pleasure, and happiness play an essential role in consumer consumption (Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982). Modern consumer culture is driven by a constant search for new experiences and excitement that underlines the perpetual presence of unfulfilled desires that drives consumers. Besides, the constant longing and search for pleasure results in enjoyable frustration (Campbell, 1994). Alba and Williams (2013, p. 4), who review research on hedonic consumption, note that a “vital component of hedonic consumption is whether the experience of consuming

the product or event is pleasurable.” Perceived enjoyment has been considered in the IS literature. It is defined in TAM as “the extent to which the activity of using the computer is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated” (Davis et al., 1992, p. 1113). In their study, the concept is considered in the context of customers of word processing software, and business graphic programs and positive interaction between perceived usefulness and enjoyment is reported. The results explain 62% and 75% of the intention to use computers in the workplace in the two contexts, respectively.

In proposing UTAUT 2 for a consumer context, Venkatesh and colleagues (2012) recognize the importance of the hedonic aspect and propose hedonic motivation as an additional predictor of behavioral intention. However, enjoyment requires involvement; it is retrospective and a reflective process (cf. Csikszentmihalyi, 1990, 1996; Hoffman & Novak, 2009; Nakamura & Csikszentmihalyi, 2002). When making future decisions, consumers use affective evaluations of past hedonic experiences and translate those into future preferences (Vilches-Montero, 2016). This occurs from the experiences that customers look back upon with a feeling of accomplishment. It reflects a change that has occurred in the customer as a result of the experience, whether it is related to work or play. Therefore, besides perceived enjoyment which is reflected in hedonic motivation, we also propose anticipated enjoyment among gamblers, as an additional driver of gambling intention in an online context. Anticipated enjoyment represents an important direct driver of behavior intention that is not captured by the hedonic motivation construct used in UTAUT 2.

Anticipation is a central theme in the conceptualization of expectations. Oliver (2006, p. 576) has defined them as “anticipation of future consequences based on prior experience and other many and varied sources of information.” Expectations are best thought of as standards employed by customers that can be predictive (will) and ideal (should/desired). Oliver (2006, p. 577) further argues that consumers “will pursue those products which they expect to fulfill their needs. Thus, the expectation and not the need is what the consumer brings into the purchase.” Predictive expectations are pre-purchase cognition about the performance of a product (Park & Choi, 1998), and represent consumers’ prior belief about the future performance or attributes of a product (Ngobo, 1997; Summers & Granbois, 1977). We, therefore, define anticipated enjoyment as an affective pre-purchase phenomenon whereby recreational gamblers anticipate the enjoyment that can potentially result from an activity. Hence, we hypothesize that

**H1:** Higher anticipated enjoyment has a positive impact on online gambling intention.

### **Perceived Fairness**

Issues of fairness of products, games, and services offered online have increasingly become a concern for both recreational gamblers and regulators (Cook, 2017;

UKGC, 2017d, 2018a, 2018b; Petty, 1998; Yani-de-Soriano, Javed, & Yousafzai, 2012). In a business in which random number generators, or slot machines, dominate, customers need to feel assured that they are treated fairly and transparently. Many recreational gamblers have concerns about online betting firms paying out customers' winnings and ensuring the fairness of their games (Wood & Williams, 2009). There is also "a substantial proportion [of customers] believing that there is an "on/off" switch that can be used to cheat customers" (Gainsbury et al., 2013, p. 243). Chiu and colleagues (2009, p. 349) define perceived fairness as "an individual's perception about the output/input ratio, the procedure that produces the outcome and the quality of interpersonal treatment." Chiu and colleagues (2009) operationalize perceived fairness as a three-dimensional construct consisting of distributive, procedural and interactional fairness. All three dimensions are relevant to an online gambling context. Distributive fairness refers to the degree to which customers' expectations are being met; procedural fairness is about customers' perceived ability to complain and speak to representatives; interactional fairness focuses on how fairly and respectfully customer service representatives act and treat clients. Perceived fairness or its dimensions have been linked to behavior intention (Namkung & Jang, 2009; Palmer et al., 2000; Su & Hsu, 2013). However, despite its relevance, perceived fairness of how operators treat customers has not previously been incorporated in UTAUT as a possible driver impacting purchase intention. However, it is not clear whether the link is direct or indirect. Hence, we propose the following hypotheses:

**H2:** Higher perceived fairness positively influences online gambling intention.

**H2a:** The effect of perceived fairness on online gambling intention is mediated by effort expectancy.

**H2b:** The effect of perceived fairness on online gambling intention is mediated by anticipated enjoyment.

**H2c:** The effect of perceived fairness on online gambling intention is mediated by social influence.

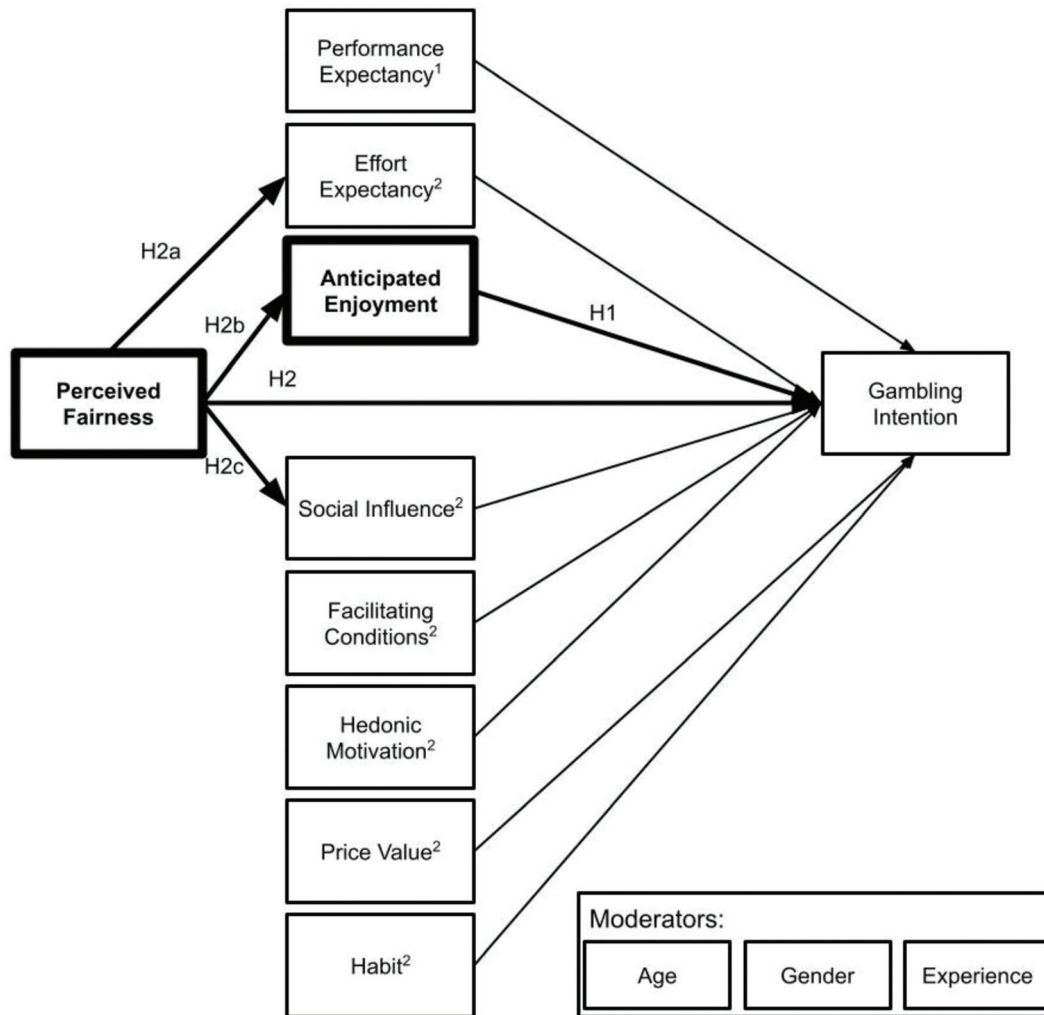
The hypotheses being proposed in this research represent enhancements to the model for behavioral intention outcome in the UTAUT 2 model. The enhanced model is depicted in Figure 1 and has been called UTAUT 2-G. The moderating relationships of gender, age and experience exhibit no change from those depicted in the original models. Relationships that are kept from the original model are depicted with slimmer arrows, while additional constructs and new hypothesized relationships are highlighted in bold.

## **Method**

Data were collected from a convenience sample of casino customers of an online gambling firm based in a European jurisdiction. The company agreed to send a survey to a random sample of 2500 of their active customers (last login date within the last three months) of one of their main brands. Steps were taken to encourage

**Figure 1**

Research model: UTAUT 2-G, including Perceived Fairness and Anticipated Enjoyment.



Note: <sup>1</sup> = Moderated by age and gender; <sup>2</sup> = moderated by age, gender and experience.

completion: first, potential respondents were ensured that all data gathering was anonymous and would not be linked to their customer account, nor would it be possible to identify their IP address—an option that irrevocably removes this information was selected in the data gathering program used; second, the questionnaire was designed to be mobile friendly and required a short completion time; and, third, a small incentive consisting of fifty free spins for the value of €0.10 per free spin on one of the online slot machines was offered. The free spins did not include any wagering requirement and customers could keep or immediately withdraw eventual winnings from playing the free spins. To receive the gift, all the customers had to do was to enter a bonus code that was provided with the questionnaire. Qualtrics was used for online data collection.



Steps were also taken to ensure that ethical standards were maintained. First, the form-ticking design of the instrument meant that no immediate harm or discomfort would result. Second, informed consent was ensured via a cover letter which appeared before the commencement of data collection and described the academic nature and purpose of the research. Participation was completely voluntary, and respondents could discontinue completing the questionnaire at any point. Respondents were also given the contact details of one of the researchers to consult if they so desired. Third, the privacy and anonymity of the respondents were safeguarded. Respondents visited a separate university website that accommodated the Qualtrics pages where the questionnaire was hosted and could be completed. Classificatory data collected did not ask questions of a private nature. No individual identification was available to the researchers, and no individual respondent data could be or was provided to the supporting firm. All data analysis undertaken and shared was at an aggregated level.

The instrument used to collect data was written in English and consisted of two filter questions, followed by a total of 58 items. The first filter question asked respondents whether they were currently playing on any online gambling website, while the second asked whether respondents played exclusively online or offline. Only respondents who answered positively to the first question, and indicated in the second question that they played at least sometimes online were presented with the rest of the questionnaire. The 56 items of the questionnaire consisted of 34 items that captured the constructs that made up the original UTAUT 2 model; 16 items that captured the enhancements introduced by the inclusion of anticipated enjoyment and perceived fairness; 3 items that captured the moderators of user experience, age, and gender; while a further 3 items captured additional demographic variables for residency, employment, and education. User experience was collected by asking respondents to indicate the number of years they had been gambling online.

The 34 items that sought to capture the constructs employed in UTAUT 2 consisted of measures for PE—performance expectancy (four items); EE—effort expectancy (four items), FC—facilitating conditions (four items), HM—hedonic motivation (three items), PV—price value (three items), HAB—habit (four items) and GI—online gambling intention (three items). These measures were identical to those employed by Venkatesh and colleagues (2012) but suitably amended to reflect the online gambling context. However, in the case of social influence, nine items from the measure by Moore and Ohtsuka (1999) were used instead of the measure used by Venkatesh and colleagues (2012) as these were deemed more appropriate for the online gambling context. A point of difference from how Moore and Ohtsuka (1999) captured social influence is that only normative belief items were considered and motivation to comply elements were not included. Several researchers hold that it is not necessary to include motivation to comply, describing measures of motivation to comply as “unsatisfactory” (Ajzen & Fishbein, 1972, p. 4). Moreover, the inclusion of motivation to comply was likely to attenuate the correlation between subjective norm and behavioral intention (Ajzen, 1991; Ajzen & Driver, 1992). It is to be noted that in the case of effort expectancy, the wording is such that, the higher the value,

the stronger it is expected that effort will be low. Thus, by way of example, a high score on the first effort expectancy question, reading: “My interaction with an online gambling system needs to be clear and understandable,” means that a low level of effort is required. All items, except for social norms, were measured using 7-point, Likert-type scales, ranging from 1 = Strongly disagree to 7 = Strongly agree. Social influence was measured using Likert scales.

The measures for both anticipated enjoyment and perceived fairness used for the investigation of UTAUT 2-G consisted of 16 items. The measure for anticipated enjoyment consisted of five-items inspired by the perceived enjoyment semantic-differential scale used by van der Heijden (2004) that was based on the earlier work of Cheung and colleagues (2000) and Igarria and colleagues (1996). The measure for perceived fairness consisted of an 11-item measure that captured distributive (4 items), procedural (4 items) and interactional (3 items) fairness dimensions. The items were based on the measures by Folger and Konovsky (1989), Moorman (1991) and Maxham and Netemeyer (2002), suitably amended to represent the online gambling context. In both cases, the questions were accompanied by 7-point, Likert-type scales that ranged from 1 = Strongly disagree to 7 = Strongly agree.

The different measures that make up the data collection instrument were purposely chosen from validated measures to facilitate content validity. Each measure has received significant psychometric attention in previous studies. Slight and careful alteration to item wording was undertaken to reflect the online gambling context of this research. All constructs in the models consisted of reflective constructs. In the case of two of the drivers, namely social influence and perceived fairness, these were modeled as second-order reflective constructs made up of two and three dimensions, respectively. A pre-test of the final research instrument was conducted among a sample of thirty online gambling customers to determine and improve item comprehension and completion, as well as to test the data gathering process and response time. The final wording for all items and constructs used in the final analyses are shown in Table 1.

## Results

From the 2,500 questionnaires sent out, a total of 642 questionnaires were attempted, of which 593 were fully completed, providing an effective response rate of 23.7%. Respondents were 36% female, with a mean age of 39 years ( $SD = 10.16$ ) and mean gambling experience of 7 years ( $SD = 4.83$ ). The mean age for when respondents started to gamble was 32 years ( $SD = 10.73$ ). Residency was reported by 591 respondents; almost 40% were resident in the UK; 19% in Finland, 16% in Sweden and 12% in the Netherlands. The remaining 3% of respondents came from several other countries. The employment item was completed by 583 of the respondents; 40% reported being skilled or unskilled manual employees, almost 25% stated that they were junior, middle or senior managers; and 22% were unemployed or homemakers. The remaining respondents were students and pensioners. The question asking for respondents' highest level of completed education was answered by 573 respondents;

**Table 1**  
*Descriptive statistics*

Item ID	Item/Construct	Mean	SD
<b>Performance Expectancy (PE)</b>			
PE_1	I find online gambling valuable to my daily life.	3.94	1.55
PE_2	Online gambling increases my chances of achieving things that are important to me.	3.49	1.62
PE_3	Online gambling helps me accomplish things more quickly.	3.30	1.53
PE_4	Online gambling makes my life better.	3.56	1.57
PE Total		14.28	5.40
<b>Effort Expectancy (EE)</b>			
EE_1	My interaction with a gambling website needs to be clear.	5.72	1.30
EE_2	It should be easy for me to become good at using gambling websites.	5.31	1.36
EE_3	I expect to find gambling websites effortless to use.	5.33	1.34
EE_4	Learning to use a gambling website should be trouble-free.	5.68	1.24
EE Total		22.03	4.31
<b>Social Influence - Friends (SN_Fnds)</b>			
SN_Fnds1	Most of my friends approve of online gambling.	3.01	1.04
SN_Fnds2	Most of my friends sometimes gamble online.	3.25	1.03
SN_Fnds3	My friends would approve of me gambling online.	3.11	1.09
SN_Fnds Total		9.37	2.73
<b>Social Influence - Family (SN_Fam)</b>			
SN_Fam1	My family approves of online gambling.	2.69	1.16
SN_Fam2	People in my family sometimes gamble online.	2.97	1.27
SN_Fam3	My family members spend €100 or more per week on online gambling.	2.05	1.25
SN_Fam4	My family would approve of me gambling online.	2.80	1.16
SN_Fam Total		10.51	3.76
<b>Social Influence (SN)</b>			
SN Total*		19.88	5.69
<b>Facilitating Conditions (FC)</b>			
FC_1	I have the resources necessary to use online gambling websites.	5.38	1.29
FC_2	I have the knowledge necessary to use online gambling websites.	5.57	1.24
FC_3	Gambling websites are compatible with other websites I use.	5.05	1.32

**Table 1** Continued.

Item ID	Item/Construct	Mean	SD
FC_4	I can get help from others when I have difficulties using gambling websites.	4.62	1.46
FC Total		20.62	4.05
Hedonic Motivation (HM)			
HM_1	Using gambling websites is fun.	5.37	1.19
HM_2	Using gambling websites is enjoyable.	5.35	1.21
HM_3	Using gambling websites is very entertaining.	5.34	1.25
HM Total		16.06	3.36
Price Value (PV)			
PV_1	The price of online gambling is reasonable.	4.50	1.40
PV_2	Gambling online provides me with good value for the money I play.	4.34	1.42
PV_3	At my current spending, online gambling provides good value.	4.22	1.53
PV Total		13.05	3.95
Habit (HAB)			
HAB_1	The use of gambling websites has become a habit for me.	4.62	1.52
HAB_2	I am enthusiastic about using gambling websites.	4.79	1.26
HAB_3	I must use gambling websites.	3.54	1.64
HAB_4	Using gambling websites has become natural to me.	4.49	1.50
HAB Total		17.45	4.82
Anticipated Enjoyment (AntEnj)			
ENJ_1	I find using gambling websites to be enjoyable.	5.77	1.10
ENJ_2	The actual process of using gambling website is pleasant.	5.54	1.12
ENJ_3	The animation encountered during the navigation process is exciting.	4.98	1.32
ENJ_4	Navigating on gambling websites provides me with a sense of adventure.	4.61	1.44
ENJ_5	I have fun using gambling websites.	5.67	1.11
ENJ Total		26.56	4.81
Distributive Fairness (DF)			
DF_1	I think what I get is fair compared to the price I pay.	4.21	1.46
DF_2	I think that the processes required for making monetary transactions are appropriate.	4.73	1.35
DF_3	I think the value of the services that I receive from the gambling website is worth the effort I invest.	4.45	1.33
DF_4	I think that the gambling products I use are fair.	4.62	1.39
DF Total		18.01	4.57

**Table 1** Continued.

Item ID	Item/Construct	Mean	SD
<b>Procedural Fairness (PF)</b>			
PF_1	The procedures used by the gambling website for handling problems occurring in the gambling process are fair.	4.58	1.33
PF_2	The gambling website allows customers to complain and state their views.	4.79	1.34
PF_3	I believe the policies of the gambling website are applied consistently across all customers.	4.56	1.40
PF_4	The gambling website clarifies decisions about any changes to the website and provides additional information when requested by the customer.	4.76	1.30
PF Total		18.70	4.45
<b>Interactional Fairness (IF)</b>			
IF_1	Customer service representatives of the gambling website treat me with respect when interacting with me through email, chat, telephone or any other communication method.	5.27	1.24
IF_2	Customer service representatives of the gambling website treat me with politeness when interacting with me through email, chat, telephone or any other communication method.	5.29	1.19
IF_3	Customer service representatives of the gambling website treat me with friendliness when interacting with me through email, chat, telephone or any other communication method.	5.28	1.23
IF Total		15.85	3.40
<b>Perceived Fairness (PerFair)</b>			
PerFair Total		52.55	10.39
<b>Gambling Intention (GI)</b>			
GI_1	I intend to use gambling websites in the next month.	6.04	1.44
GI_2	I predict that I will gamble online in the next month.	6.06	1.42
GI_3	I plan to use and gambling websites in the next month.	6.06	1.36
GI Total		18.16	4.00
EXP (Experience)	Active online gambler (in years)	7.09	4.83
AGE	Age last birthday (in years)	39.31	10.16

Note: Items DF\_1 and PF\_1, and SN\_Fam\_3, SN\_Fam\_4 and SN\_Fam\_6 were deleted to respect equilibrium between lower order constructs (Hair et al. 2014) while ENJ\_3 and ENJ\_4, and FC\_4 and HAB\_3 were deleted after a pre-analysis because they exhibited loadings of less than .70 (Hair et al., 2011). \*SN Total was computed by summing SN\_Fnds and SN\_Fam.

36% reported having completed a university degree; 23% had completed a diploma or vocational degree, and 35% had completed secondary schooling.

This research looks at recreational gamblers and seeks to identify drivers of online gambling intention by comparing results from a UTAUT 2 model and an enhanced UTAUT 2-G model for the online gambling context. Following Venkatesh and colleagues (2012), the analysis undertaken uses partial least squares structural equation modeling (PLS-SEM) via Smart-PLS (Ringle et al., 2015). The constructs of perceived fairness and subjective norms are represented as higher-order reflective-reflective constructs. They have been modeled by reusing the indicators of the lower-order constructs, as suggested by Hair and colleagues (2014). These authors further suggest that the number of indicators in lower-order constructs should be the same, as otherwise the “relationships between [lower- and higher-order constructs] may be significantly biased” (Hair et al., 2014, p. 230). Perceived fairness (PerFair) is conceptualized as consisting of the three dimensions of distributive fairness (DF), procedural fairness (PF), and interactional fairness (IF). The first two dimensions were each measured with four indicators, whereas the third dimension was measured with three indicators. Similarly, social influence (SN) consists of two dimensions, one relating to friends (SN\_Fnds) and the other to the family (SN\_Fam), measured with three and six indicators, respectively. To respect the recommendation in Hair and colleagues (2014) and to ensure the equilibrium of indicators between the lower-order constructs belonging to one higher-order construct, we conducted a pre-analysis, and we examined indicator loadings on the lower- and higher-order constructs. This procedure resulted in the omission of DF\_1 and PF\_1 and SN\_Fam\_3, SN\_Fam\_4 and SN\_Fam\_6 from further analyses since these displayed indicator loadings lower than .70. The pre-analysis furthermore revealed that indicators ENJ\_3 and ENJ\_4, and FC\_4 and HAB\_3 also exhibited loadings below .70 and were therefore also removed (Hair et al., 2011).

Following Venkatesh and colleagues (2012), separate model testing was undertaken with and without indirect effects for each of UTAUT 2 and UTAUT 2-G. To derive the necessary results, we ran all models using the PLS algorithm with default settings except that in bootstrapping procedure, five thousand rather than five hundred subsamples were used (cf. Hair et al., 2011; Sarstedt et al., 2017). The guidelines by Sarstedt and colleagues (2017) for the evaluation of the PLS-SEM output were observed, and results for the assessment of the measurement model and the structural model are reported.

### **Assessment of measurement model**

Composite reliability scores for all constructs were higher than .80, and Cronbach’s alphas for all constructs were above .80 exceeding the .70 threshold (Henseler et al., 2015). AVE scores ranged from .54 for PerFair to .90 for GI, and all exceeded the .50 threshold, indicating satisfactory convergent validity, as on average, the latent construct, accounts for 50 percent or more of the variance in the observed variables (Sarstedt et al., 2017)—see Table 2. These results provide support for the reliability and convergent validity of the constructs used in the models.

**Table 2**  
*Composite Reliability (CR), AVE and Correlation Matrix*

Construct	CR	AVE	PE	EE	SN	SN_Fam	SN_Fnds	FC	HM	PV	HAB	AntEnj	PerFair	DF	PF	IF	GI
Performance Expectancy (PE)	0.900	0.693	<b>0.833</b>														
Effort Expectancy (EE)	0.893	0.675	0.163	<b>0.822</b>													
Social Influence (SN)	0.880	0.575	0.325	0.137	<b>0.720</b>												
Social Influence Family (SN_Fam)	0.893	0.737	0.261	0.127	0.892	<b>0.786</b>											
Social Influence Friends (SN_Fnds)	0.897	0.745	0.314	0.112	0.865	0.545	<b>0.863</b>										
Facilitating Conditions (FC)	0.836	0.577	0.192	0.447	0.172	0.145	0.153	<b>0.760</b>									
Hedonic Motivation (HM)	0.941	0.842	0.338	0.389	0.169	0.143	0.153	0.489	<b>0.918</b>								
Price Value (PV)	0.935	0.826	0.411	0.205	0.415	0.358	0.372	0.391	0.525	<b>0.909</b>							
Habit (HAB)	0.877	0.643	0.377	0.213	-0.042	-0.099	0.033	0.286	0.331	0.142	<b>0.802</b>						
Anticipated Enjoyment (AntEnj)	0.888	0.616	0.289	0.362	0.161	0.132	0.151	0.348	0.548	0.395	0.187	<b>0.785</b>					
Perceived Fairness (PerFair)	0.920	0.513	0.344	0.354	0.303	0.262	0.270	0.48	0.556	0.665	0.185	0.474	<b>0.716</b>				
Distributive Fairness (DF)	0.897	0.686	0.448	0.293	0.394	0.341	0.353	0.411	0.472	0.736	0.137	0.438	0.830	<b>0.828</b>			
Procedural Fairness (PF)	0.898	0.688	0.253	0.257	0.216	0.185	0.194	0.353	0.415	0.520	0.151	0.378	0.873	0.593	<b>0.829</b>		
Interactional Fairness (IF)	0.947	0.857	0.152	0.341	0.140	0.123	0.121	0.445	0.513	0.399	0.178	0.370	0.802	0.468	0.580	<b>0.926</b>	
Gambling Intention (GI)	0.964	0.898	0.101	0.365	-0.008	0.009	-0.025	0.255	0.257	0.077	0.218	0.421	0.185	0.132	0.127	0.211	<b>0.948</b>

Henseler and colleagues (2015) show that the two traditional approaches for testing discriminant validity using the Fornell-Larker criterion and cross-loadings do not provide a useful basis. They present the alternative heterotrait-monotrait ratio (HTMT), which is “the average of the [...] correlations of indicators across constructs measuring different phenomena [...] relative to the average [...] correlations of indicators within the same construct” (Henseler et al., 2015, p. 121). The authors further argue that in models that use conceptually different constructs that are however empirically difficult to distinguish (such as use intention and use behavior, or as in the present research, hedonic motivation and anticipated enjoyment), a more liberal HTMT<sub>.90</sub> threshold may be adopted. However, all reported values in this study meet the more conservative criterion of HTMT<sub>.85</sub> with values lower than .85. The only exceptions are the two second-order constructs used, namely social influence and perceived fairness. These second-order constructs exhibit HTMT values that are greater than or close to 1. Since these two constructs are conceptualized as higher-order constructs, it is to be expected that their lower-order dimensions cannot be highly discriminating. Therefore, overall these results provide support for the discriminant validity of the measures used to capture the constructs in the models.

### **Assessment of structural model**

As a first step in the assessment of the structural model, multicollinearity issues were investigated by examining the VIF values among the constructs in the model. The results indicated that all VIF values among predictor constructs were less than 5.0, providing evidence that there are no multicollinearity issues (Sarstedt et al. 2017). In the next step,  $R^2$  and adjusted  $R^2$  values for the endogenous constructs, including their bias-corrected confidence intervals, were inspected. The variance explained in gambling intention (GI) by the predictor constructs differs across the models investigated and ranges from a low of 17% in UTAUT 2 to a high of 39% in UTAUT 2-G. An examination of path coefficients shows that the impact of performance expectancy (PE) on gambling intention (GI) is not significant in any of the models. In contrast, its effort expectancy (EE) cousin from the original TAM and TAM2 models is highly significant in all models ( $p < .001$ ), with effects ranging from .22 to .29. The impact of social influence (SN) on GI is not significant in any of the models. Anticipated enjoyment (AntEnj) is found to have a strong and significant ( $p < .001$ ) impact on GI, with path coefficients ranging from .36 to .37. This latter result provides support for H1 so that higher anticipated enjoyment does have a positive impact on online gambling intention. The results also show that the predictors added by Venkatesh and colleagues (2012) to their UTAUT 2 model consisting of facilitating conditions (FC) and hedonic motivation (HM), were not found to be significant. Price value (PV) was only significant in UTAUT 2-G while habit (HAB) is significant in UTAUT 2 and UTAUT 2-G with direct effects only.

The impact of perceived fairness (PerFair) on GI was four-fold and consisted of its direct relationship (H2) to GI and the three alternative mediated relationships, via EE (H2a), AntEnj (H2b) and SN (H2c), respectively. The path coefficient of



the direct relationship is not significant in any of the models. Therefore, H2 is not supported, and higher perceived fairness does not positively impact gambling intention directly. However, the three mediated indirect effects are significant, providing support for H2a and H2b, and conditional support for H2c suggesting that the effect of PerFair on GI is fully mediated by AntEnj and EE for all models. More specifically, the indirect effect of PerFair on GI via AntEnj that ranged from .20 to .21 was highly significant ( $p < .001$ ) while the indirect effect of PerFair on GI via EE was small but significant, ranging from .06 to .07 ( $p < .01$ ). The indirect effect of PerFair on GI via SN is neither significant in UTAUT 2 nor UTAUT 2-G. The total effect of PerFair on GI exhibits strong significance across both model variations at .25 ( $p < .001$ ). These results offer further support for the inclusion of PerFair and AntEnj as significant predictors of GI in an online gambling context.

The original research by Venkatesh and colleagues (2003; 2012) proposing UTAUT and UTAUT 2 respectively, assessed three- and four-way interactions of the moderating variables on the relationships between the independent variables and the dependent variable. However, these studies fail to report how these moderators are calculated. In the present study, the three- and four-way interactions were computed by multiplying the values for the different moderating variables in SPSS version 21 before analysis in Smart-PLS, specifically gender (GEN) and age (AGE); GEN and experience (EXP); AGE and EXP; GEN and AGE and EXP. The resultant composite variables were then used in the models to compute interaction effects. In the original research assessing both UTAUT and UTAUT 2 models, the moderators for AGE, GEN and EXP were found to play a significant role. However, the role of these moderators in an online gambling context as depicted in UTAUT 2G is not supported in this research.

The effect of omitting specific predictor constructs on the models was evaluated by an examination of  $f^2$  values for the latent variables (Cohen, 1988). Results show that the omission of EE, PerFair and AntEnj results in significant reductions in  $R^2$  for the different dependent variables. Specifically, omitting EE ( $f^2 = .54-.73$ ;  $p < .05$ ) and AntEnj ( $f^2 = .14-.16$ ;  $p < .01$ ) would significantly reduce the  $R^2$  for GI; omitting PerFair would significantly reduce  $R^2$  for AntEnj ( $f^2 = .30$ ;  $p < .001$ ), EE ( $f^2 = .14$ ;  $p < .01$ ) and SN ( $f^2 = .10$ ;  $p < .01$ ). The other latent constructs do not provide significant effects.

To assess the predictive relevance of resultant models, Sarstedt and colleagues (2017) and Hair and colleagues (2011) recommend inspection of the  $Q^2$  values of the endogenous constructs, with values greater than zero indicating “that the exogenous constructs have predictive relevance for the endogenous construct under consideration” (Hair et al., 2011, p. 145). The results show that  $Q^2$  values for GI are all above zero and increasing with model complexity from .14 to .28, thereby providing support for the predictive relevance of the models investigated.

## Discussion

Recreational online gambling has increasingly become a mainstream form of entertainment. UTAUT 2 represents the most recent iteration in the evolution of models attempting to explain behavior intention in a technological context. However, despite the possible relevance of UTAUT 2 to the online gambling context, exploration in the area has been scarce. This research considers this context and proposes enhancements that incorporate constructs for anticipated enjoyment and perceived fairness to the existing theoretical models, that has been labeled UTAUT 2G, and sets out to determine whether this alternative model is better able to predict gambling intention. Anticipated enjoyment recognizes that when making future decisions, consumers make use of affective evaluations of past hedonic experience that they translate into future preferences. Perceived fairness acknowledges that online gambling firms have faced increased pressure from the public and media to take responsibility for the harm their products may potentially cause. Indeed, as Binde (2005, 2007b, 2009) and others (e.g., Hing et al., 2014; McMullan & Miller, 2008; UKGC, 2017a) make clear: it is the responsibility of the service provider to ensure that customers are treated fairly and are not misled. The results show that the model improvement that incorporates anticipated enjoyment and perceived fairness as depicted in UTAUT 2G explains more of the variance in gambling intention than the original UTAUT 2.

The recognition of the role of anticipated enjoyment and perceived fairness represents a useful contribution to theory. Interestingly, the results show that online gambling intention is better predicted by anticipated enjoyment and perceived fairness and that these two constructs replace PE, FC, HM, PV and to a large extent also HAB and SN in the original UTAUT 2. These findings find support in the results reported by van der Heijden (2004, p. 696) who looked at the IT industry. He distinguished between hedonic and utilitarian information systems, where the former seeks “to provide self-fulfilling value to the user, in contrast to utilitarian systems, which aim to provide instrumental value to users.” Van der Heijden (2004, p. 699) investigated hedonic systems and argued that the value of such a system “is a function of the degree to which the user experiences fun when using the system.” Therefore, he further argues that in a hedonic system, perceived ease-of-use and perceived enjoyment take on a more dominant role. In contrast “perceived usefulness loses its dominant predictive value in favor of ease of use and enjoyment” (van der Heijden, 2004, p. 699).

The centrality and strength of anticipated enjoyment may also be explained by Cowley’s (2013) finding that gamblers predict being excited by play. However, they tend to forget how they actually felt during play and thus are not able to include these visceral emotions in their prediction or anticipation of how they will feel in the future. Nevertheless, the anticipation of enjoyment during play, even though falsely or selectively remembered, is still an influential predictor of intention as it does not necessarily need to match the actual, post-anticipatory experience. In other words, the anticipated enjoyment of riding a roller coaster may not be confirmed while riding it or after riding it. Similarly, the excitement and enjoyment anticipated before

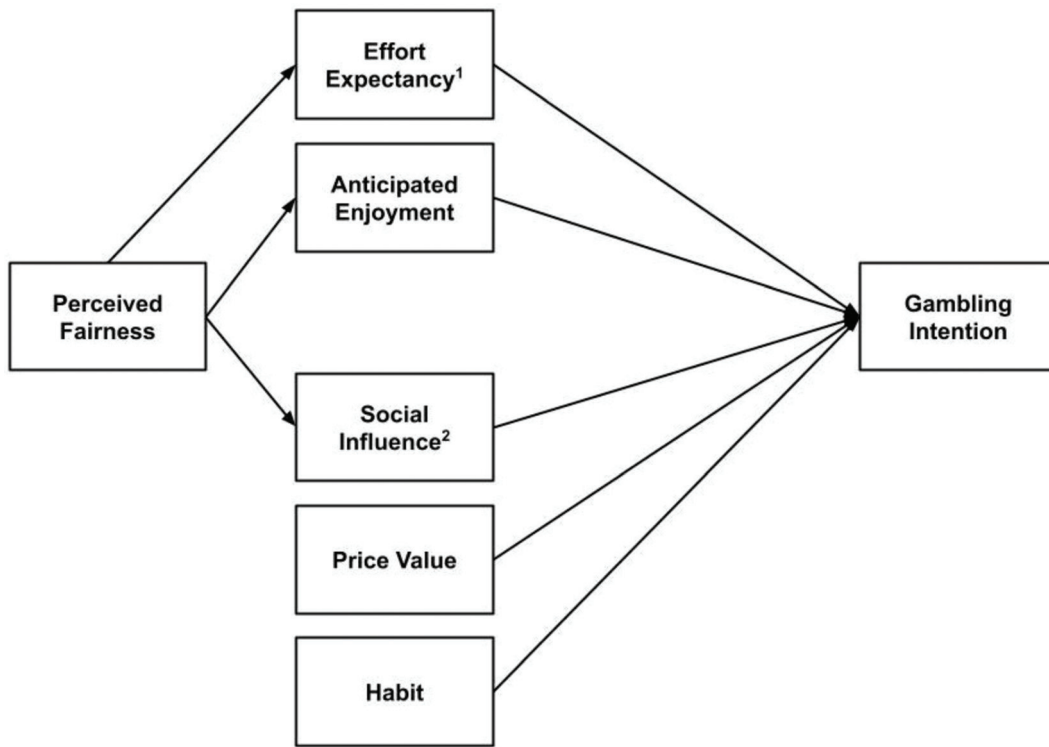
gambling may not be confirmed or matched during or after gambling. While the emotions in all three states are linked, they do not necessarily influence each other (Cowley, 2013).

The results of this research provide further confirmation that performance expectancy—a legacy construct from perceived usefulness—is not a significant driver of gambling intention, whereas effort expectancy and anticipated enjoyment are. Perceived fairness is also found to be significant and comes as no surprise. Indeed, the importance of fairness is not reserved for the world of gambling. Several instances do occur where customers are concerned about fairness in other online games. A case in point is where customers of free-to-play (non-betting) online games are then offered in-game purchases that allow those willing to spend extra money to advance faster (Hamari et al., 2017; Lin & Sun, 2011). In games of chance, where at least to a certain degree, outcomes depend on probabilities, perceived fairness among customers is seen as an important guarantor that all other influences are accounted for and equal for all. Therefore, besides the uncertainty of whether customers will win or lose a bet or spin, they do not also wish to worry about whether they are being treated fairly and equitably. So, even though gamblers may embrace outcome uncertainty, they need to believe that the procedures, interactions and transactions with an operator are fair. The online gambling firm that can ensure perceived fairness to customers is more likely to be rewarded with higher levels of gambling intention and ultimately customer retention.

Shorn of drivers and moderators that are not significant, the resultant gambling intention model from this research is shown in Figure 2 and titled GIM. This resultant parsimonious model identifies three key drivers of online gambling intention consisting of the original EE and SN from UTAUT, together with the two added constructs of anticipated enjoyment and perceived fairness. Anticipated enjoyment is found to have the strongest effect on betting intention, followed by EE and perceived fairness. These results are relevant to both marketers and online gambling industry regulators.

For marketers, these findings suggest that they need to look at ways to both enhance anticipated enjoyment and minimize effort expectancy. Communication activities that associate fun, pleasure, and excitement are critical elements in the former while online systems that are user friendly are imperative for the latter. This last aspect is not without its challenges as many online gambling systems are made available by the same software firms and are identical across platforms of different online betting firms and casinos. Thus, to stand out, the marketing positioning of an online betting firm needs to add extra value above and beyond the actual gambling systems. By analogy, Granny Smith apples are Granny Smith apples, no matter in which shop they are bought. However, the way these apples are presented in shops differs as do the additional incentives provided, atmosphere, service and other elements of marketing—yet, at the end of the day, Granny Smith apples are still Granny Smith apples. Of course, marketing in this sector is not without its dangers and managers need to ensure ethical behavior. Therefore, they need to respect utilitarian ethics by

**Figure 2**  
*Gambling Intention Model (GIM).*



Note: <sup>1</sup> = Moderated by age and experience; <sup>2</sup> = moderated by age and gender.

optimizing the “common good,” respecting the rights of others as well as showing regard for a sense of justice and fairness towards all involved parties.

In contrast, industry regulators can seek to limit the glamour and enticement that marketing communications can employ to enhance anticipated enjoyment. Action may involve voluntary industry codes, legislation that bans advertising, or a requirement to show gambling addiction warnings following any promotional communication. A further possibility is to consider imposing limitations and notices on the front-end adaptations used by online betting companies when presenting their betting products. A number of these measures are already in place in certain jurisdictions. For instance, the Swedish gambling authority already requires that customers set daily, weekly and monthly depositing limits, before any gameplay (Röhr, 2018) and advertising depicting gambling is being closely monitored (e.g., Wikén, 2019). This latter aspect is also occurring in the UK (e.g., UKGC, 2017a) where, besides, so-called “reality checks” must be displayed to customers at regular intervals, to make them aware of the time they have spent on an online betting site (UKGC, 2017c). However, such measures are unlikely to limit the anticipated enjoyment of customers. Therefore, a possible approach to mitigate anticipated enjoyment may be to start to promote gambling health-related issues, as has been

done with tobacco and alcohol-related products (Ginley et al., 2017; Pettigrew et al. 2016; Stautz & Marteau, 2016).

In the case of perceived fairness, the findings from this research suggest that higher perceived fairness increases anticipated enjoyment, mitigates effort expectancy and strengthens gambling intention. Improving fair practices is very much a win-win situation and provides little that is contentious as it is beneficial to customers, marketers and industry regulators. It allows firms to offer a better recreational product while ensuring customer protection against dubious practices. Indeed, a recent study by Ivanova and colleagues (2019) suggests that recreational gamblers are not put off by protective measures that enhance perceived fairness. This research shows that customers are more inclined to play with firms whom they perceive to be fair and whose products they anticipate will be fun and enjoyable. Moreover, this outcome is not hampered by what customers believe others may think of their choice to gamble. Many western countries have witnessed a general weakening of social norms about recreational gambling. Binde (2005) alludes to the change in attitude towards gambling, especially in the aftermath of the Second World War. Also, it is not inconceivable that advertising and media attention has led to increased product awareness and a concomitant decrease in personal stigma arising from gambling. Moreover, online gambling whether via desktops or laptops, and especially via mobile devices, provides almost complete privacy from family and friends so that it is difficult for either to really know and therefore influence, what family members or friends are doing.

### **Limitations and Future Research**

This research is not without limitations. First, generalizations to all online betting firms must be made with caution. The research is based on a convenience sample among customers of an online casino of a single online betting firm. Future research could look at investigating the GIM model (depicted in Figure 2) across a range of betting products and with online gambling firms operating in different jurisdictions. However, since customers often have accounts with multiple online betting firms in different countries, a comparison of samples across different geographical regions rather than different countries can be considered. The research findings have identified anticipated enjoyment and perceived fairness as important drivers of online betting intention. It may quite well be that these constructs can represent useful additions to explaining purchase intention beyond the context of online gambling, especially in an online entertainment context. Therefore, the role of these constructs in predicting purchase intention in other contexts is also worthy of further research.

Second, the GIM model described has the benefit of providing a parsimonious model that identifies key drivers to betting intention. Indeed, it has been argued that UTUAT with at least eight independent variables is rather chaotic (Bagozzi, 2007) and that it requires a significant number of variables (van Raaij & Schepers, 2008). Notwithstanding the parsimonious model proposed in this research, the results show that the maximum variance explained was moderate at 39.2% for UTUAT

2-G. This finding suggests that other antecedents exist that are not represented in the current model that need identification and investigation. One possible aspect that should be considered is the size of a potential win. Evidence suggests that the size of a potential win can be an important driver to gambling intention, especially for those who would gain relatively more compared to their disposable income (Kwang, 1965). This possibility suggests in turn that preferences for games with different payout percentages may affect gambling intention (Turner & Horbay, 2004). In these circumstances, marketers would highlight the chances of considerable winnings while industry regulators would want to limit potential winnings as an important check on problem gambling. Two further variables that may impact online gambling intention may be the corporate or brand reputation of an online casino and customers' willingness to take risks (cf. Chiu et al., 2012). Future research could include such constructs to improve the predictive ability of the model.

Third, the first-order constructs used in UTAUT and its predecessors (TAM, etc.) have traditionally been modeled reflectively (Chan et al., 2010; Venkatesh et al., 2003, 2012; Zhou et al., 2010). However, the definitions of performance expectancy and effort expectancy suggest that they could be modeled formatively (Chin, 1998; Gefen et al., 2000; Sánchez-Franco, 2006). The inclusion of formative forms for these constructs could further help improve the predictive ability of the model.

Fourth, in measuring perceived fairness and social norms that have been conceptualized as reflective-reflective higher-order constructs, this research has followed the recommendations in Hair and colleagues (2014). They suggest reusing the measures of lower-order constructs in the higher-order construct as repeated indicators. However, other researchers point out that reflective-reflective higher-order constructs are not ideal and should be avoided (Finn & Wang, 2014). This research recognizes the challenges that the use of such constructs presents and has opted to use them in a tradeoff between theoretical relevance and possible measurement complications. Future research may consider using unidimensional versions for both perceived fairness and social norms in any replication.

Fifth, and finally, in terms of data collection, a convenience sample from a single firm was employed in this research with data primarily collected across customers from four European countries, namely the UK, Finland, Sweden, and the Netherlands. Future research may consider employing a broader representative sample of recreational online gamblers across a number of firms focusing on single markets. The latter would help avoid any possibility that cultural differences may impact respondents' evaluation of the constructs presented. However, the respondents involved in the data collection are from countries that are culturally sufficiently close to mitigate concerns about issues of equivalence.

## **Conclusion**

This study investigates the drivers of online recreational gambling intentions using UTAUT 2 as its baseline model. No previous study appears to have employed

UTAUT 2 to investigate recreational online gambling intentions among customers. Fun and enjoyment are known to be key motivators of recreational gambling while fairness has more recently received much attention both in the online gambling community and with regulators. Therefore, the research proposes the addition of anticipated enjoyment and perceived fairness as possible enhancements to UTAUT 2 to propose an improved UTAUT 2-G model for investigating drivers of betting intention in a recreational online gambling context. The results show that both anticipated enjoyment and perceived fairness significantly and positively impact online gambling intentions for recreational gamblers. Higher levels of both anticipated enjoyment and perceived fairness result in greater online gambling among customers. These findings have important implications for both managers of online gambling websites as well as for regulators: (1) The creation of a sense of excitement and anticipation positively influences the intention of customers to play. Conversely, the absence of excitement or intentional spoiling can reduce gambling intentions. (2) Fairness is increasingly important to online gambling customers who are often spoilt for choice among the myriad online providers. Transparency of processes, as well as openness and fair treatment by customer service representatives all contribute to an improved perception of fairness. This in turn positively influences gambling intention. In an industry still stained by stigma and prejudice of unfair or unlawful practices, a focus on fairness can aid betting firms to determine a unique market positioning. Equally, technological, procedural and other measures imposed by regulators on betting firms to enhance fairness should be welcomed and implemented by the industry. Since customers value fairness, betting firms complying with stipulated regulations can expect higher retention and acquisition rates.

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