

# Factors Affecting Intention to Use Online Dating Sites in Malaysia

Syed Shah Alam<sup>1\*</sup>, Md. Rabiul Islam<sup>2</sup>, Zafir Khan Mohd Mokhbul<sup>3</sup>, Nurkhalida Binti Makmor<sup>4</sup>

<sup>1</sup>Graduate School of Business, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor Malaysia

<sup>2</sup>Department of Marketing, University of Rajshahi, Rajshahi Bangladesh

<sup>3</sup>Faculty of Economics and Management, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor Malaysia

<sup>4</sup>Graduate School of Business, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor Malaysia

\*Corresponding author E-mail: [shahalam@ukm.edu.my](mailto:shahalam@ukm.edu.my)

## Abstract

Online dating communities have great market potential; therefore, understanding the perceptions of young generation of the factors influencing their intention to use such site is vital. This research examined five key dimensions of intention to use online dating communities in Malaysia based on some information system theories. Research model for this study was developed based on the literature on information system research. This study was adopted convenient sampling of non-probability sampling procedure. Data were collected through self-administered questionnaire and multiple linear regression was used to analyze data. The findings of the study show that word-of-mouth, attitude, perceived enjoyment and perceived playfulness are key determinants of young adults' intention to use online dating sites. However, there is no significant relationship between trust and intention to use online dating sites. This research can serve as a starting point for online dating research, while encouraging further exploration and integration addition adoption constructs. Other business agencies should create better awareness of the usage of online dating sites. As Malaysian are choosing their own pair for their family life, so this finding gives some insight to the young generation of Malaysia to focus on finding their own partners from online sites.

**Keywords:** online dating, attitude, enjoyment, playfulness, trust, Malaysia

## 1. Introduction

Online networking sites is one of the most popular social networking system that allows individuals, couples and groups to contact and search for their personal and romantic partner. Other than pornographic websites, online dating sites is another largest paid online business sites (Online Publishers Associations (OPA)). According [1] at Chain Store Age online dating is a huge success story. Estimated to be a \$2 billion global business, about one in every ten Americans is using an online site or mobile dating app to look for love today. [2] Deputy Women's editor, The Telegraph highlighted that in near future around 35 per cent of British couples will meet online. eHarmony reported that by 2040 seventy per cent of British will join online dating site. According to a report by [3] online dating services account for 49% of USA dating service industry. A news highlighted by [onlinepersonalswatch.com](http://onlinepersonalswatch.com) that in 2012 total USA dating services was worth US\$2.14 billion and was expected to grow 4.7% per year to \$2.54 billion in 2015. Besides, [4] found that there is much business value in such communities, in terms of access to valuable consumers and consumer data.

Given the huge potential for this market, it is important to study the adoption behavior of users, i.e. the factors that encourage or discourage the use of online dating websites. [5] identified online dating sites as one of the most popular technology driven innovations to initiate romantic relationship although many online dating sites involve deliberate misrepresentation of the

truth (as many users do not reveal truthful information about themselves. [6] provided an explanation to this, i.e. online interaction is an integrated part of modern social life driven by the basic human need to interact. Thus, users still look for a romantic partner, connection, or encounter regardless of the misrepresentations. This study concurs with [7] research which found that like other offline method, online networking system is widely used for interaction by people in the western society. Western people interact with each other online like any other offline methods because of their need to interact. However, no empirical research has been done on adoption factors for online dating sites. In Malaysia, there is much potential for such sites. Almost half of the population (10 million) use social network such as Facebook (including dating sites in Facebook) and the number of users are growing rapidly by about 23% per year [8]. Therefore, the objective of this study is to conduct an empirical investigation of the factors that influence Malaysians' intention to use online dating sites. This research will provide recommendations for marketers on how to understand the consumer behavior of this market and how to attract consumers.

## 2. Literature Review

An easy way to comply with the paper formatting requirements is [5] defined online dating "as the place where individuals create, profile, and initiate contact with others through an online service". [9] and [10] posited that making relationships through online system was easier, faster and more intimate than other

ways of forming romantic relationships. They argued that the anonymous nature of online dating sites was the main reason to for their popularity. No doubt, face-to-face meetings and telephone communication can help make offline relationship; however, online contact can enhance self-integration, and provide autonomy and intimacy. Additionally, online dating sites can be used for cyber-flirting [11], cyber-sex [12] and cyber-cheating [13].

[14] highlighted that online dating is extremely important as online dating already accounts for substantial proportion of the initiation of romantic relationship in developed country. [15] analysed online dating psychologically. This study raised two issues such as a) whether online dating is fundamentally different from conventional offline dating and b) whether online dating promotes better romantic outcomes than conventional offline doing. To understand how online dating fundamentally differs from conventional offline dating and the circumstances under which online dating promotes better romantic outcomes than conventional offline dating, this research considered three major services i.e. access, communication and matching services. This study results show found that online dating sites is fundamentally (uniqueness) different than offline dating and mixed results found for whether online dating sites promotes better romantic outcomes than conventional offline dating.

A large scale study conducted in the US by [16] examined people's behavior on online dating sites. They found that the respondents were single and searching for romantic partner via online dating sites. Seventy four percent of the respondents claimed that they have gone online to look for romantic relationship. Fifteen per cent of the respondents were aware of people who have made long-term relationships or married someone whom they originally met online. [17] examined the use of Gale-Shapley algorithm in online dating sites for users to find the right match on their mate preferences. They found that female respondents gave more emphasis on their partner's income than the male respondents. [18] conducted a survey of varsity 300 students to investigate the attitudes to using the Internet to further one's romantic interests. They found that most of the students knew someone who had or developed their romantic relationship online.

### 3. Conceptual Background

Although few research have been studied about online dating communities, there is no study on the factors that influence users of these sites in Malaysia. This is important research lacunae as Malaysia is the fourth largest users of social network (like Facebook) in Asia [8], and marketers would need some understanding of the consumer behavior in this market segment.

Information systems implementation depends on specific social, cultural, economic, legal and political contexts, which may differ significantly between countries [19] [20] [21] that limit the generalization of research results from developed countries to developing country contexts [22]. This justifies an empirical investigation of Malaysian young generation readiness or concerns about their current and potential use of online dating sites to uncover the factors that encourage or deter online dating sites usage. Moreover, this will contribute to confirm past findings of a limited research attempts in developing country context [23] [24] (and possible generalization on the adoption of e-commerce [21]).

Information Systems (IS) researchers have made significant efforts in building theories to examine and predict the determinant factors of information technology (IT) acceptance [25]. Existing models of IT acceptance have their foundations from several diverse theories, most noticeable innovation diffusion

theory, where individuals' perception about using an innovation are considered to affect their adoption behavior [25] [26] [27]. Other important theoretical models that attempts to explain the relationship between user beliefs, attitudes, intentions, and actual system use include perceived characteristics of innovating (PCI) [27], the theory of reasoned action (TRA) [28], the theory of planned behavior (TPB) [29] (and the technology acceptance model (TAM) [30] [31]). Most of the researchers use these models [32] [33] [34] [35] in their research and ignore other important variables those have influence on behavioral intention to use systems. Therefore, in this study five important variables are included in the theoretical framework namely: word-of-mouth [36]; attitude [32] [37]; perceived enjoyment [38] [39]; perceived playfulness [40] and trust [41] [42].

Researcher like [43] and [44] stated that it is well documented that positive word-of-mouth communications influence consumer decision making. [45] explain Word-of-mouth behavior within online social networks sites is originated from the users' desire to maintain social relationships within their personal networks. [46] argued that a positive WOM provides beneficial information about a product/service to customers and thereby assist the promotion of the product/service [46]. In the growing online social communications, electronic WOM has been an important topic to business and marketing researchers [47]. According to [36] e-word-of-mouth affect behavioral intention.

Various studies have confirmed that attitude has significant impact on behavioural intention [48]. [49] study found that attitude has significant influence on online buying intention. [50] conducted a review which shows that 29 out of 30 studies found attitude as the best predictor of intention. In general, the more favorable the attitude toward the behavior, the stronger will be an individual's intention to adopt the behavior.

Online dating is a voluntary and hedonic activity, and users participate because they are intrinsically motivated. The experience often offers entertainment and fun, which users have been found to appreciate. Perceived enjoyment is another variable that uses in this research. Technology adoption studies defined perceived enjoyment as the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use [31]. It has been suggested that traditional usability approaches are too limited to fully explore user technology adoption and should be extended to encompass enjoyment [38]. In this study we postulated that the experience of being engaged or simply having fun can have an impact on intentions to use online dating sites. According to [51] perceived enjoyment is one of the significant determinants of intentions to adopt technologies. [39] study also confirmed perceived enjoyment to be a significant antecedents to users' intentions to adopt instant messaging.

In the online dating context, researcher believe that intrinsic motivators grounded on emotional feeling, such as happiness and unhappiness may also play a crucial role in explaining user acceptance and usage. Perceived playfulness is considered as intrinsic motivation is included in this study as it will influence on behavioral intention to use online dating site. The perceived playfulness is defined as the degree to which performing an activity is perceived as providing pleasure and joy in its own right. Empirical study by [40] confirmed that relationship between perceived playfulness and user's intention to use WWW.

Recently researchers have started to study trust in online contexts [41] [42] [52]. Trust has been studied extensively in organizational studies [53] [54]. According to [55] trust as "the willingness of a trustor party to be vulnerable to the actions of trustee party based on the expectation that the trustee party will perform a particular action important to the trustor party, irre-

spective of the ability to monitor or control the trustee party.” Trust is a positive expectation in which that the other side does not seeking his own benefit on his/her speeches, actions and decisions [56]. Due to uncertainties and dependency trust is consider one of the main factor in social interaction. Making relationship through online dating site is not only involve uncertainty but also have anonymity and these factors provide importance of trust on online dating sites. Thus trust is important in the online dating context user of online dating sites must provide personal information when they register. Such personal information is subject to potential abuse; for example, the data might be used for marketing solicitations or shared with third parties. Thus, online dating site users may have concerns about the misuse of their personal information.

#### 4. Theoretical Framework and Hypotheses

The research framework developed for this study is shown in Figure 1. This framework was developed based on prior research. The schematic diagram of the theoretical framework is used to show the relationship between the dependent and independent variables. Intention to use online dating sites was the dependent variable in this research. Five factors have been identified as the independent variables i.e. word-of-mouth by friends, attitude, perceived enjoyment, perceived playfulness and trust.

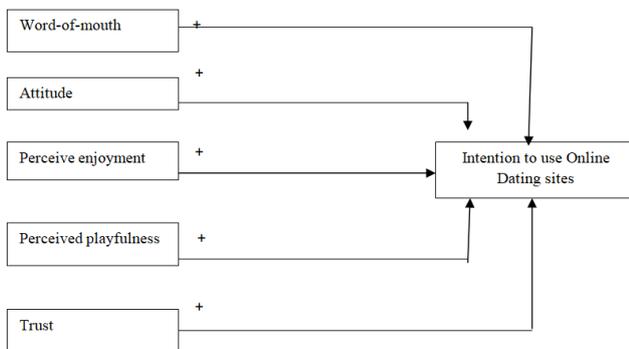


Fig. 1: Research Framework

Word-of-mouth is the first factor examined. [57] [58] studies identified compared different forms of marketing and found that word-of-mouth (WOM) marketing is one of the most important factors influencing consumer behavior. (2004) study confirmed that WOM has been shown to influence intentions and actual behavior of consumers. Therefore, it was posited that:

H1: Word-of-mouth has a positive influence on intention to use online dating sites.

[30] stated that a person's action is determined by his/her behavioral intention which is influenced by an attitude toward the behavior. [59] empirical studies had been supported this theory. According to them, intention was a good predictor of behavior. Attitude towards a behavior factor is the positive or negative evaluation of performing the behavior informed by beliefs about the individual's possession of the opportunities and resources needed to engage in the behavior [29]. Attitude towards the online dating sites (e.g. comfort level in sharing personal information online) was thought to influence intention to use the sites. Therefore, it was posited that:

H2: Attitude has a positive influence on intention to use online dating sites.

To validate and treat Technology Acceptance Model (TAM) as an endogenous variable for greater predictive power, [60] and [61] incorporated a hedonic factor into TAM. [60] also included similar construct i.e. hedonic motivation in his prediction of intention to use mobile Internet based on his revised Unified Theory of Acceptance and Use of Technology (UTAUT 2).

Their studies validated the correlation between the hedonic and behavior intention factors. There are two aspects of hedonic factors, i.e. perceived enjoyment and perceived playfulness. In the former, investigations of the use of wireless devices and Web sites showed that the devices and websites were enjoyable to users. To explicitly construct the role of intrinsic motivation in TAM, [61] introduced the concept of perceived enjoyment. This construct describes the extent to which consumers' enjoyment is perceived through the activity of using a specific product or service. [63] studied in Singapore and found that perceived enjoyment have a positive impact on Internet users. In the latter, [60] and [41] found perceived playfulness, or fun, was treated as an important hedonic factor antecedent to consumers' attitude toward using a system. Therefore, it was posited that:

H3: Perceived enjoyment has a positive influence on intention to use online dating sites.

H4 Perceived playfulness has a positive influence on intention to use online dating sites.

Trust is psychological factor to pursue further interaction with a website [64]. If a user trusts a website, it will increase his/her intention to use it. Trust is very important in the initial stage of adoption in e-commerce and will increase as user receive positive experience with a website [64]. In online communities, [37] found that trust in a website ability positively affects usage intention. Therefore, it was posited that:

H5: Trust has a positive influence on intention to use online dating sites.

#### 5. Method

##### 5.1. Participant and Data Collection

Primary data were collected through the use of a survey questionnaire. The questionnaires were personally administered to the respondents. The target respondents are university students (aged 18-24) as they are the largest users of social network such as Facebook (34.1%) compared to other age groups [65]. Facebook is used as a yardstick as there are many online dating sites in it such as Social Connect Now (<http://www.isocialconnect.com/>) and college candy (<http://collegecandy.com/2010/01/30/1h-facebook-and-dating-wheres-the-mystery/>). Three hundred and thirty two questionnaires were distributed and collected out of a population 6000 students from one of the private university in Selangor state in Malaysia. A total of 311 (96.6%) were finally used (due to the missing value). The study took students as respondents because [66] suggested that students are the most suitable group to be considered as they are young consumers with marketing potential for many years to come. Additionally, according to [67] and [68] studies, majority of users of online dating sites are students thus students should be the appropriate respondents.

The majority of the respondents were female (61.09 percent), more than half of the respondent (52.09 percent) were between the age of 21 and 23. The Chinese group was the highest contributors of the total respondents (53.70 percent) and the second highest group is represented by Malays with (43.73 percent).

##### 5.2. Questionnaire Design

The first section of the questionnaire contains three questions capturing the respondents' demographic information such as race, gender and age. The remaining sections comprise of questions measuring the respondents' perceptions on intention to use online dating sites and determinants that influence online dating site usage intention. The questionnaire consists of 27 items scored on a 6-point Likert's scale. The items were adaptations of the items in

the constructs in the prior literature [39] [57] [60] [61] [63] [69]. They are presented in Tables 2a and 2b.

### 6. Results

Table 1 shows the Cronbach Alpha’s reliability analyses of all the independent and dependent constructs. It was found that all constructs have a value exceeding the minimum standard value of 0.7 [70]. This indicates that the measures used in the questionnaire were highly reliable for measuring the constructs.

**Table 1:** Font Specifications for A4 Papers

Variables	Coefficient Alpha
Word of mouth	.889
Attitude	.793
Perceived enjoyment	.834
Perceived playfulness	.856
Trust	.745
Intention to use online dating site usage	.892

#### 6.2. Construct Validity

Table 2a showed the results of factor analysis of the independent variables and Table 2b showed the dependent variable. [70] suggests that items with low factor loading indicate that the items are not drawn from the same factor/domain and they should be excluded to reduce error. [71] recommended a loading of at least 0.4. Tables 2a and 2b showed that all item loadings were above 0.4 and they were loaded into 5 independent factors and one dependent factor.

**Table 2a:** Results of Factor Analysis on Independent variables

Factors with Items Loaded in Each Factor	WOM	ATT	PE	PP	Trust
<b>Word of Mouth</b> I find information given by my friends and relatives about this online dating site is trustworthy	<b>.545</b>	.405	.099	-.489	-.011
I know someone who had bad experiences with this online dating site	<b>.628</b>	.032	-.311	-.394	-.313
Many of my friends and relatives recommend me to use online dating site	<b>.562</b>	.273	-.428	.031	.139
I trust what my friends and relatives says about this online dating provides reliable information	<b>.505</b>	.296	-.467	.261	-.104
<b>Attitude</b> I would use online dating service for searching my partner	.309	<b>.484</b>	-.066	.128	-.035
Using online dating service is something I would do	-.080	<b>.555</b>	.096	.165	-.020
I could see myself using online dating service to find my dating partner	-.071	<b>.510</b>	.088	.309	.151

I feel comfortable in sharing my information through online dating services	-.116	<b>.443</b>	.114	-.036	-.103
<b>Perceived enjoyment</b> I find using online dating services entertaining	.257	.208	<b>.774</b>	-.088	-.044
I find using online dating services pleasant	-.019	.198	<b>.478</b>	.126	.084
Using online social dating services is exciting	.066	.037	<b>.585</b>	-.051	.397
It is fun to use online dating services	-.148	-.062	<b>.499</b>	-.057	.345
<b>Perceived Playfulness</b> When interacting with Online dating site I did not realize time had elapsed	.240	.230	-.245	<b>.492</b>	
When interacting with Online dating site I often forgot the task I was doing	.185	.135	-.036	<b>.435</b>	
Interacting with Online dating site leads to exploration	.086	-.084	.040	<b>.478</b>	
Interacting with Online dating site I had fun	.116	-.017	.041	<b>.560</b>	
Interacting with Online dating site is enjoyable	.115	-.013	.037	<b>.519</b>	
<b>Trust</b> I feel very comfortable using this online dating services	.114	-.036	-.103	.011	<b>.409</b>
I have used a lot of this online dating services	-.061	.193	-.071	-.281	<b>.483</b>
Consider this dating services is my first choice if I use same services through online.	-.074	.038	-.230	.012	<b>.441</b>
This online dating services is a name I can always trust.	.144	.182	.049	.128	<b>.422</b>
This dating services always delivers on what they promise.	.064	-.017	.000	.165	<b>.421</b>
Eigen value	5.223	2.836	1.671	1.452	1.115
Variance (%)	26.115	14.182	8.354	7.284	5.574
Rotation method: Varimax KMO- .732 Bartlett’s Test of Sphericity sig.000					

**Table 2b:** Results of Factor Analysis on Independent variables

Attributes	Behavioural Intention
Making relationships over the online dating is a good idea	<b>.594</b>
There is no charge for online dating service	<b>.503</b>
The online dating web site provide a full facility to chat with my partner(s)	<b>.453</b>
I feel comfortable in using online dating services	<b>.493</b>

### 6.3. Multi-Collinearity

Two major methods were utilized in order to determine the presence of multicollinearity among independent variables in this study. These methodologies involved calculation of both a Tolerance Test and Variance Inflation Factor (VIF) [72]. The results of these analyses were presented in Table 3. As can be seen from this data, i) none of the Tolerance levels is  $<$  or equal to .01; and ii) all VIF values were well below 10. Thus, the measures selected for assessing independent variables in this study do not reach levels that indicate multicollinearity. Additionally, the acceptable Durbin – Watson range is between 1.5 and 2.5. In this analysis, the Durbin – Watson value of 1.851, which was within the acceptable range, shows that there was no correlation issue in the data used in this research.

**Table 3:** Test of Collinearity

Variable	Tolerance Level	VIF
Word of mouth	.770	1.298
Attitude	.825	1.212
Perceived enjoyment	.779	1.284
Perceived playfulness	.823	1.215
Trust	.847	1.180

### 6.4. Hypotheses Testing

The five hypotheses were tested using a multiple regression prediction model following the guidelines established by [73] with intention to use online dating site as the dependent variable. The results were presented in the Table 4. The table revealed that word-of-mouth ( $\beta=.153$ ;  $p<0.001$ ) have a significant influence on intention to use online dating sites, therefore, H1 is accepted. The table also revealed results that support hypotheses H2, H3 and H4 that is, the relationship between attitude ( $\beta=.144$ ;  $p<0.01$ ), perceived enjoyment on online dating site usage intention ( $\beta=.177$ ;  $p<0.001$ ), and perceived playfulness on online dating sites usage intention ( $\beta=.317$ ;  $p<0.001$ ).

**Table 4:** Regression Result

Variables	Beta	t-value	p-value
Constant		2.668	.008
Word-of- mouth	.153	2.922	.004***
Attitude	.144	2.668	.008**
Perceived enjoyment	.177	3.293	.001***
Perceived playfulness	.317	6.050	.000***
Trust	.049	.941	.347

R-squared = 0.311, Adjusted R-squared = 0.300, (\*\*) $p<.01$ , (\*\*\*) $p<.001$ . Dependent Variable: Online dating sites usage intention

## 7. Discussions

This study examines the intention to use online dating sites in Malaysia by young adults. Internet is providing incredibly useful features when it comes to matching their partners online. It is also a more modern and organized approach to mating ritual. The main intention of this study is to assessing the attitude of the students towards online dating site usage intention.

Results showed the relationships between intention to use online dating sites and the determinants that influenced intention to use online dating sites. More specifically, word-of-mouth, attitude, perceive enjoyment and perceived playfulness have significant relationship with intention to use online dating sites.

Firstly, perceived playfulness and enjoyment were found to be the most important factors that influence intention to use online dating sites. [74] through qualitative phone interviews of 34 users of online dating community found that participants are playful and fun, engaging in creative walk around or circumventing strategies to hide their personal information such as their age, weight, body

statistics, looks, etc. to create positive impressions and have fun in online dating sites. This is a very useful finding as marketers could apply this same theory for the Malaysian users. They could create playful applications to allows them to modify their photographs to make them look more fun and easier to find a match. Additionally, they could have more fun activities such as online games, self-expressions through videos, blogs, role plays, user comments and ratings of previous dates, and recommendations of dates to friends. These features will attract users to increase their interaction with the website, encourage them lock in the website, and improve customer relationship and loyalty.

Secondly, word of mouth or recommendation is an important determinant of intention to use online dating sites. [75] and [74] found that users of online dating sites are facing trust issues with the potential partners as they found a huge discrepancy in the online information and the actual offline experience during dates as the user do not disclose the truths about the age, weight, shape, and hair color. The present research recommends that word-of-mouth recommendations should be used. This is supported by [34] which found that users' trust in members' integrity in to provide truthful word-of-mouth recommendations in China's online communities can stimulate usage intention. Members (users) should be given the chance to express their experience with their dates, rate them in terms of their honesty and personality. This will enhance the credibility of the dating website as the comments/ratings come from the word of mouth of the members' experience.

Thirdly, it is interesting to note that the users are not facing trust issue with the dating websites as shown in the non-significant result for the 'trust' variable. One way of explaining this finding is trust is more significant in the earlier stage of adoption and increases with familiarity [64]. Since Malaysians are familiar with online communities (based on high adoption rate of Facebook), trust is not a relevant issue. This indicates that there is a great marketing potential for online dating communities in this country since trust is not an issue.

Lastly, attitude found an important determinant of intention to use online dating sites. Attitude individually is one of the important determinants which ensure successful usage of online dating sites. This finding is similar to research such as [76, 77, 78, 79].

## 8. Implications

### 8.1. Implications for Research

This study presents an introductory research that explains 45 percent of the variance among students intention to use online dating sites. This research can serve as a starting point for other online dating research, while encouraging further exploration and integration addition adoption constructs. Future research needs to focus on a larger cross section and more diversified random samples to verify the findings of the current study. Moreover, to further clarity of the factor influence on online dating sites usage by young generation, other model could be used. Future inquiries could also examine the causal relationships between factors and perceive overall online dating sites usage by employing a structural equation modeling technique.

This research is limited as only young university students (aged 18-24) were surveyed. Future researches will include all other online users for generalizing of the research model on intention to use online dating sites usage. Additionally, perceived playfulness and enjoyment are short term affective factors that influence usage intention [80]. Future research could investigate the long term affective factors that affect continued usage such as intimacy and familiarity of the online dating communities [80].

## 8.1. Implications for Practice

As it is found in this study, respondents mentioned cannot trust online dating sites, and the system should be made as user-friendly as possible and make it trustable. Providing online help and giving end users the choice of their preferred language will ease of their usage. Management of online dating sites provider should provide adequate information in their sites on how to use online dating sites systems at all levels must be ensured so that the users should get comfortable with its use. Security of information must be ensured with the help of the restricted access level of passwords. Other business agencies should create better awareness of the usage of online dating sites. As Malaysian are choosing their own pair for their family life, so this findings give some insight to the young generation of Malaysia to focus on finding their own partners from online dating sites.

## 9. Conclusions

This paper validated a research model of intention to use online dating sites for Malaysian young adults. Four determinants were found, i.e. perceived playfulness, perceived enjoyment, word of mouth and ease of use. Marketing recommendations were given to tackle the young consumers in Malaysia. In summary, the website has to provide features to suit the playful nature of the users, make the interactions enjoyable, allow user ratings, comments and recommendations, and be simple to use.

The research was done under theoretical framework that was developed based on the previous study. The multiple regression analysis shows that word-of-mouth, attitude, perceive enjoyment and perceived playfulness are significant elements of online dating sites usage intention. Despite some limitations, this research makes some notable contributions. First, we review existing literature in online research area and develop a theoretical framework and also identify both absolute and relative view of the gap. Second, we provide an analysis of the state of the factors driving it that owes its foundation to existing research and extends, thus unifying and advancing the field of knowledge. Finally, we examine the factors contributing to online dating sites usage intention and are unique in the research to date.

## References

- [1] Eifrem, E (2016). The surprising lessons retailers can learn from online dating sites, Chain Store Age, available at <http://www.chainstoreage.com/article/surprising-lessons-retailers-can-learn-online-dating-sites#>, date 19<sup>th</sup> October 2017.
- [2] Cohen, C. (2014). Online dating is on the march. Available at <http://www.telegraph.co.uk/news/predictions/gender/11308655/online-dating.html>, (access 03 September 2017).
- [3] Seitz, P. (2014). Online Dating Leader IAC may hood up even more users, available at <http://news.investors.com/technology-click/042814-698678-match-okcupid-parent-expected-to-gain-market-share.htm>, dated 05-02-2017
- [4] Spaulding, T.J. 2010. How can virtual communities create value for business? *Electronic Commerce Research and Applications*, 9(1), 38-49
- [5] Hencock, J.T., Toma, C. and Ellison, N. 2007. The truth about Lying in Online Dating Profiles. CHI 2007 Proceedings, Online Representation of Self, April 28-May 3, 2007, San Jose, CA, USA. 449-452.
- [6] Wellman, B. and Haythornthwaite, C. 2002. *The Internet in Everyday Life: An Introduction*, Oxford: Blackwell Publishers, Fall 2002
- [7] Wellman, B. 2001. Physical place and cyber place: The rise of personalized networking. *International Journal of Urban and Regional Research*, 25(2), 227-252.
- [8] Grey Review (2012) Latest estimates of facebook users by country (Q1, 2011) Available at: <http://www.greyreview.com/2011/04/05/latest-estimates-for-facebook-users-by-country-asia-quarter-1-2011/> (Access 10 March 2017)
- [9] Wysocki, D. K. 1998. Let Your Fingers do the Talking: Sex on an Adult Chat-line. *Sexualities*, 1 (4), 425-452
- [10] Walther, J. B. [9] 1996. Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23 (1), 3-44.
- [11] Whitty, M.T. 2003. Cyber-Flirting: Playing at Love on the Internet. *Theory & Psychology*, 13 (3), 339-357.
- [12] Blair, C., 1998. *Netsex: empowerment through discourse*. In: Ebo, B., Editor, 1998. *Cyberghetto of Cybertopia? Race, Class and Gender on the Internet*, Praeger, Westport, CT, pp. 205-217.
- [13] Hardie, E. and Buzwell, S. 2006. Finding Love Online: The Nature and Frequency of Australian Adults' Internet Relationships. *Australian Journal of Emerging Technologies & Society*, 4 (1), 1-14.
- [14] Aron, A. (2012). Online Dating: A Critical Analysis from the Perspective of Psychological Science, *Psychological Science in the Public Interest*. 13(1), 1-2.
- [15] E.J. Finkel, P.W. Eastwick, B. R. Karney, S. Sprecher, Online Dating: A Critical Analysis from the Perspective of Psychological Science, *Psychological Science in the Public Interest* 13(1):3-66
- [16] Madden, M. and Lenhart, A. 2006. Online Dating, Pew Internet and American Life Project, March 5, 2006. Washington, DC.
- [17] Hitsch, G. J. Hortaçsu, A. and Ariely, D. 2006. What Makes You Click? — Mate Preferences and Matching Outcomes in Online Dating, *Social Science Research Network*, 10 (1), 1-7.
- [18] Donn, J.E. and Sherman, R.C. 2002. Attitudes and Practices Regarding the Formation of Romantic Relationships on the Internet, *CyberPsychology and Behavior* 5 (2), 107-23.
- [19] Bibi, A., Bukhari, S., Sami, A., Irfan, A., Liaqut, H. (2018). Effect of Latest Technology and Social Media on Interpersonal Communication on Youth of Balochistan. *Journal of Managerial Sciences*, XI (3), 475-490
- [20] Shore, B., 1998. IT Strategy: The Challenge of over-regulation, culture, and large scale collaborations, *Journal of Global Information Technology Management*, 1(1): 1-4.
- [21] Spanos, Y.E., G.P. Prastacos and A. Poulmenakou, 2002. The relationship between information and communication technologies adoption and management, *Information and Management*, 39: 659-675.
- [22] Dewan, S. and K.L. Kraemer, 2000. Information technology and productivity: Preliminary evidence from country-level data, *Management Science*, 46(4): 548-562.
- [23] Molla, A. and P.S. Licker, 2005a. eCommerce adoption in developing countries: a model and instrument, *Information & Management*, 42: 877-899.
- [24] Molla, A. and P.S. Licker, 2005b. Perceived E-Readiness factors in E-Commerce adoption: an empirical investigation in a developing country, *International Journal of Electronic Commerce*, 10(1): 83-110.
- [25] Agarwal, R. and J. Prasad, 1997. The Role of Innovation Characteristics and Perceived Voluntariness in the Acceptance of Information Technologies, *Decision Sciences*, 28(3): 557-582.
- [26] Rogers, E.M., 1995. *The Diffusion of Innovations*, Free Press, N.Y. New York.
- [27] Moore, G.C. and I. Benbasat, 1991. Development of an instrument to measure the perceptions adopting an information technology innovation, *Information Systems Research*, 2(3): 173-191.
- [28] Ajzen, I. and M. Fishbein, 1985. The prediction of Behavior from attitudinal and normative variables. *Journal of experimental social Psychology*, 466-488.
- [29] Ajzen, I. 1991. The Theory of Planned Behavior, *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211.
- [30] Davis, F., 1989. Perceived usefulness, perceived ease of use and user acceptance of information technology, *MIS Quarterly*, September, 13(3): 319-340.
- [31] Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1992) Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of Applied Social Psychology*, 22 (14), 1111-1132.
- [32] Alam, S. S., Ali, M. Y. and Jani, M. F. (2011a). An Empirical Study of Factors Affecting Electronic Commerce Adoption Among SMEs in Malaysia, *Journal of Business Economics and Management*, 12(2): 375-399.
- [33] Alam, S. S., Omar, N. A. and Hashim, M. N. H. N. (2011b). Applying the Theory of Perceived Characteristics of Innovating (PCI) on ICT Adoption in the SMEs in Malaysia, *Australian Journal of Basic and Applied Sciences*, 5(8): 8-17, 2011.
- [34] Alam, S. S., Ahmad, A., Mhd. Suhaimi Ahmad, M. S. and Hashim, M. N. H. N. (2011c). An Empirical Study of an Extended Theory of Planned Behaviour Model for Pirated Software Purchase, *World Journal of Management* 3 (1). 124-133.
- [35] Lu, C. T., Huang, S. Y. and Lo, P. Y. (2010). An empirical study of on-line tax filing acceptance model: Integrating TAM and TPB, *African Journal of Business Management* Vol. 4(5), pp. 800-810.

- [36] Zarrad H and Debabi M. (2015). Analyzing the Effect of Electronic Word of Mouth on Tourists' attitude toward Destination and Travel Intention, *International Research Journal of Social Sciences*, 4(4), 53-60.
- [37] Lu, Y., Zhao, L., Wang, B. 2010. From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention. *Electronic Commerce Research and Applications*, 9(4), 346-360.
- [38] Blythe, M. A., Overbeeke, K., Monk, A. F. & Wright, P. C. (Eds.) (2003) *Funology: From Usability to Enjoyment* Klumer Academic Publishers, Netherlands.
- [39] Lu, Y., Zhou, T. & Wang, B. (2008) Exploring Chinese Users' Acceptance of Instant Messaging Using the Theory of Planned Behavior, the Technology Acceptance Model, and the Flow Theory. *Computers in Human Behavior*, 6 (2), 1-11.
- [40] Moon, J. W. and Kim, Y. G. 2001. Extending the TAM for a World-Wide-Web context, *Information & Management*, 38 (4), 217-230.
- [41] Gefen, D., Karahanna, E., and Straub, D. W. (2003). "Trust and TAM in Online Shopping: An Integrated Model." *MIS Quarterly*, 27(1), 51-90.
- [42] McKnight, D. H., Choudhury, V., and Kacmar, C. (2002). "Developing and validating trust measures for e-commerce: An integrative typology." *Information Systems Research*, 13(3), 334-359.
- [43] Lien, C. H. and Cao, Y. (2014). Examining WeChat users' motivations, trust, attitudes, and positive word-of-mouth: Evidence from China, *Computers in Human Behavior*, 41 (2014) 104-111.
- [44] Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21(3), 2-20. <http://dx.doi.org/10.1002/dir.20082>
- [45] Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking site. *International Journal of Advertising*, 30(1), 47-75. <http://dx.doi.org/10.2501/IJA-30-1-047-075>.
- [46] Maxham, J. G. (2001). Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of Business Research*, 54(1), 11-24. [http://dx.doi.org/10.1016/S0148-2963\(00\)00114-4](http://dx.doi.org/10.1016/S0148-2963(00)00114-4).
- [47] Chu, S. C., & Choi, S. M. (2011). Electronic word-of-mouth in social networking site: A cross-cultural study of the United States and China. *Journal of Global Marketing*, 24(1), 263-281. <http://dx.doi.org/10.1080/08911762.2011.592461>.
- [48] Kraus S.J., Attitudes and the prediction of behavior: a meta-analysis of the empirical literature, *Personality and Social Psychology Bulletin*, 21(1), 58-75 (1995)
- [49] Dennis C (2009) E-consumer behaviour. *European Journal of Marketing* 43: 1121-1139.
- [50] Trafimow D, Finlay KA (1996). The importance of subjective norms for a minority of people: Between subjects and within-subjects analyses. *Personality and Social Psychology Bulletin* 22: 820-828.
- [51] Novak, T. P., Hoffman, D. L. & Yung, Y.-F. (2000) Measuring the Customer Experience in Online Environments: A Structural Modeling Approach. *Marketing Science*, 19 (Winter), 22-42.
- [52] Pavlou, P. A. (2002). "Institution-based trust in interorganizational exchange relationships: the role of online B2B marketplaces on trust formation." *The Journal of Strategic Information Systems*, 11(3-4), 215-243.
- [53] Kim, W. C., & Mauborgne, R. A. 1993. Procedural justice, attitudes, and subsidiary top management compliance with multinationals' corporate strategic decisions. *Academy of Management Journal*, 36: 502- 526.
- [54] McAllister, D. J. 1995. Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38: 24 -59.
- [55] Mayer, R. C., Davis, J. H., and Schoorman, F. D. (1995). "An Integrative Model of Organizational Trust." *Academy of Management Review*, 20(3), 709-734.
- [56] Esmaili, E., Desa, M. I., Moradi, H. and Hemmati, A (2011). The Role of Trust and Other Behavioral Intention Determinants on Intention toward Using Internet Banking, *International Journal of Innovation, Management and Technology*, Vol. 2, No. 1, 95-100.
- [57] Alam, S. S. and Norjaya, M. Y. 2010a. What factors influence online brand trust: evidence from online tickets buyers in Malaysia, *Journal of Theoretical and Applied Electronic Commerce Research*, 5 (3), 78-89.
- [58] Alam, S. S. and Norjaya, M. Y. 2010b. The Antecedents of Online Brand Trust: Malaysian Evidence, *Journal of Business Economics and Management*, 11 (2), 210-226.
- [59] Armitage, C.J. and Conner, M. 2001. Efficacy of theory of planned behavior: a meta-analysis review, *British Journal of Social Psychology*, 40, 471-99.
- [60] Bruner II, G.C., and Kumar A. 2005. Explaining consumer acceptance of hand-held Internet devices, *Journal of Business Research*, 58 (5), 553-558.
- [61] van der Heijden, H. 2003. Factors influencing the usage of websites: The case of a generic portal in the Netherlands, *Information & Management*, 40 (6), 541-549.
- [62] Venkatesh, V., Thong, J.Y.L., & Xu, X. 2012. Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36 (1), 157-178.
- [63] Teo, T. S. H and Lim, R. Y. C. 1999. Intrinsic and extrinsic motivation in Internet usage. *OMEGA: International Journal of management Science*, 27, 25-37.
- [64] Turban, E., King, D., Lee, J., Liang, T.P. and Turban, D. (2010) *Electronic Commerce 2010 A Managerial Perspective*. 6<sup>th</sup> Global Edition. Pearson.
- [65] Interdesly 2012. Malaysia Facebook statistics, user distribution. Available at: <http://iterdesly.info/malaysia-facebook-statistic-user-distributions/> (Accessed 10 March 2017)
- [66] Sorce, P., Perotti, V. and Widrick, S. 2005. 'Attitude and age differences in online buying', *International Journal of Retail & Distribution Management*, vol. 33, no. 2, pp. 122-132.
- [67] Ellison, N. B., Steinfield, C. and Lampe, C. 2007. The benefits of Facebook friends': Exploring the relationship between college students' use of online social networks and social capital, *Journal of Computer-mediated Communication*, 12, 1143-1168.
- [68] Wiley, C., and Sisson, M. 2006. *Ethics, accuracy and assumption: The use of Facebook by students and employers*, Paper presented at the Southwestern Ohio Council for Higher Education Special Topics Forum, Dayton, OH.
- [69] Maxham, J. G. and Netemeyer, R. G. 2002. A longitudinal study of complaining customers' evaluations of multiple service failures and recovery Efforts, *Journal of Marketing*, 66, 57-71.
- [70] Nunnally, J. C. 1978. *Psychometric Theory* (2nd ed.), McGraw-Hill, New York, NY, 85-94.
- [71] Norman, G. R. and Streiner, D. L. 1994. *Biostatistics: The Bare Essentials*, Mosby-Year Book. St Louis, MO.
- [72] Kleinbaum, D. G., Kupper, L. L., and Muller, K. E. 1988. *Applied Regression Analysis and Other Multivariate Methods*, Boston: PWS.
- [73] Hair, J. F., Anderson, R. E., Tatham R. L., and Black, W. C. 1998. *Multivariate Data Analysis* 5th Edition, California: Prentice-Hall International Inc.
- [74] Ellison, N. Heino, R. and Gibbs, J. 2006. Managing impressions online: Self-presentation processes in the online dating environment. *Journal of Computer-Mediated Communication*, 11(2).
- [75] Jacobson, D. 1999. Impression Formation in Cyberspace: Online Expectations and Offline Experiences in Text-based Virtual Communities *Journal of Computer-Mediated Communication*, 5(1): <http://jcmc.indiana.edu/vol5/issue1/jacobson.html> (Accessed 10 March 2017).
- [76] Chapman, L. (2000). Distance learning for post-registered nursing: the facts, *Nursing Standard*, 14(18), pp.33-36
- [77] Davis, F.D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioural impacts, *International Journal of Man Machine Studies*, 38(3), pp. 475-487.
- [78] Wu, I. and Chen, J. (2005). An extension of trust and TAM model with TPB in the initial adoption of on-line tax: an empirical study, *International Journal of Human-Computer Studies*, 62, pp. 784-808.
- [79] Alam, S. S., Yeow, P.H.P. and Loo, H. S. 2011. An Empirical Study on Online Social Networks Sites Usage: Online Dating Sites Perspective, *International Journal of Business and Management*, 6 (10), 155-161.
- [80] Lee, Y., Kwon, O. 2011. Intimacy, familiarity and continuance intention: An extended expectation-confirmation model in web-based services. *Electronic Commerce Research and Applications*, 10(3), 342-357.