

## A correlational study of the relationship between users acceptance and satisfaction towards behavioural intention

### Publication History

Received: 9 July 2015

Accepted: 10 September 2015

Published: 1 December 2015

### Citation

Nur Fathiah Binti Mohd-Bashri, Fadhilah Binti Mat-Yamin. A correlational study of the relationship between users acceptance and satisfaction towards behavioural intention. *Indian Journal of Arts*, 2015, 5(16), 86-92

# A CORRELATIONAL STUDY OF THE RELATIONSHIP BETWEEN USERS ACCEPTANCE AND SATISFACTION TOWARDS BEHAVIOURAL INTENTION

Nur Fathiah Binti Mohd-Bashri<sup>1</sup> and Fadhilah Binti Mat-Yamin<sup>2</sup>

<sup>1</sup>Universiti Utara Malaysia (UUM), Malaysia, nurfathiah12@yahoo.com

<sup>2</sup>Universiti Utara Malaysia (UUM), Malaysia, fmy@uum.edu.my

**ABSTRACT.** The popularity of Facebook as social interaction tool among people worldwide cannot be denied. In Malaysia, Facebook become the most popular Social Networking Site (SNS) especially among the adolescents and young adults' users in the age range of 18-35 years old. Thus, the purpose of this pilot study is to investigate the relationship between users' acceptance and satisfaction factors towards behavioural intention among the adolescents and youth users in using Facebook as social interaction tool. The reliability of measures used in this study is acceptable because the Cronbach's Alpha value for the variables and dimensions in this study is more than 0.7. Meanwhile all the hypotheses in this study are supported and in the line with the previous studies.

**Keywords:** Acceptance, Satisfaction, Behavioural Intention, Facebook, Social Interaction, Integration.

## INTRODUCTION

Facebook is the most popular visited SNSs in June compare to the other types of SNSs in the virtual world (ebizma.com, 2015). As reported on Facebook (2015) on June, there are about 936 million daily active users on average for March 2015 worldwide in using Facebook. Facebook (2011) gave the meaning of itself "*as a social utility that helps people communicate more efficiently with their friends, family and co-workers.*" (Ayu & Abrizah, 2011). In Malaysia, Facebook is reported as the most popular SNSs and about 3.5 million Facebook users are the young people aged between 18 and 24 from the total of 10.4 million Facebook users (Subramanian, 2014). According to the prevailing statistical report is conducted by Socialbakers (2014), the majority of Facebook's users in Malaysia are in the age range of 18 to 24 years old (42%) followed by people in the range age of 25 to 35 years old (38%). Interesting to know the reasons of the age cohort of 18 and 35 years old choose Facebook as medium to them interact and socialize in virtual life compare other SNSs.

Meanwhile, theoretically, the scope of technology acceptance is not same as the scope of technology satisfaction, ergo, actually the previous studies conducted are not deeply understand the success and effectiveness of IS. Naturally, there are two main streams or methods to understand the success and effectiveness of IS (Roca, Chiu & Martinez, 2006; Wixom & Todd, 2005) which is user acceptance and user satisfaction. However, the developments of these two main streams are rarely integrated for better understanding of Information System (IS) (Ong, Day & Hsu, 2009). The technology acceptance is a strong predictor of behaviours and ability to link attitude and beliefs to behaviour meanwhile the strength of user satisfaction is in its ability to link information design attributes (Au, Ngai & Cheng, 2002; Lai & Pires, 2010; Wixom & Todd, 2005). According to Seddon (1997), it is suggested to integrate these two approaches for better understanding of the factors influence the use of IS. In depth and better understanding on the acceptance of IS, many studies expose that the integration of models, instruments and theories are very useful (Lee, Kozar & Larsen, 2003). For that reason, this pilot study attempts is not only to investigate the user acceptance but also the user satisfaction towards behavioural intention in using Facebook as social interaction tool among

the adolescents and youth users (18-35 years old) Synthesizing from the literature, the study is designed to investigate the relationship between performance expectancy, effort expectancy, social influence and facilitating conditions with satisfaction among the adolescents in using Facebook as social interaction tool in their virtual life.

### CONCEPTUAL MODEL, OBJECTIVES AND HYPOTHESES

The conceptual model was developed by using Unified Theory Acceptance Use Technology (UTAUT) as independent variables meanwhile the satisfaction theory (The Doll and Torkzadeh Instrument) and behavioural intention as dependent variable. Venkatesh, Morris, Davis & Davis (2003) developed UTAUT by reviewing 8 well-known models to evaluate user acceptance. Meanwhile the Doll and Torkzadeh (1988) instrument was constructed in order to investigate the user satisfaction. Based on the comprehensive literature, the four main constructs (Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions) have an effect on the satisfaction and behaviour intention to use Facebook as social interaction tool. Only four from five dimensions in EUCS are retained i.e. content, accuracy, format and timeliness since 'ease of use dimension same as 'effort expectancy' element in UTAUT. Figure 1 indicates the conceptual model in this study. Based on the overview of the study, 5 research objectives and hypotheses are formulated as shown in Table 1.

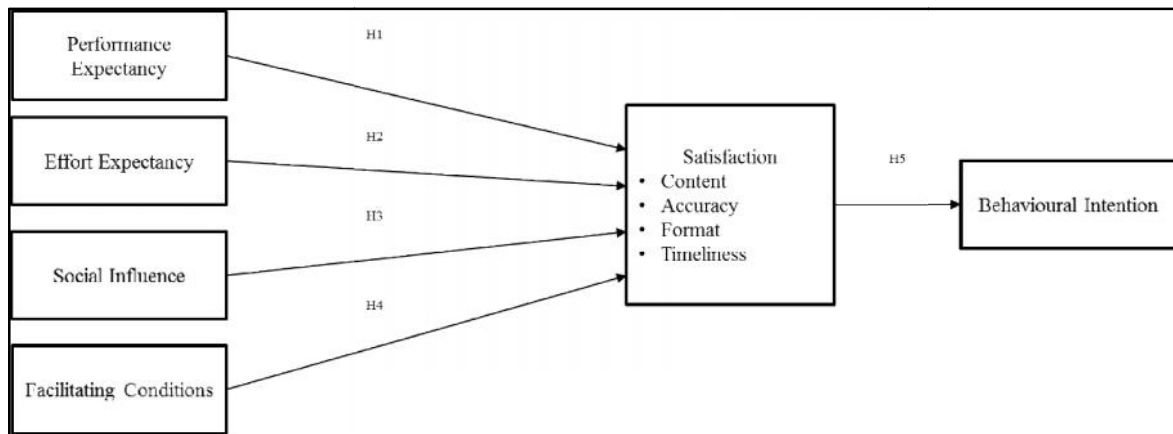


Figure 1. Conceptual Model

Table 1. The Research Objectives and Hypotheses

Research Questions	Research Hypotheses
RO1: To investigate the relationship between performance expectancy and satisfaction among the students in using Facebook as Social Interaction Tool.	H1: There is a positive correlated relationship between performance expectancy and satisfaction among the students in using Facebook as Social Interaction Tool.
RO2: To investigate the relationship between effort expectancy and satisfaction among the students in using Facebook as Social Interaction Tool.	H2: There is a positive correlated relationship between effort expectancy and satisfaction among the students in using Facebook as Social Interaction Tool.
RO3: To investigate the relationship between social influence and satisfaction among the students in using Facebook as Social Interaction Tool.	H3: There is a positive correlated relationship between social influence and satisfaction among the students in using Facebook as Social Interaction Tool.
RO4: To investigate the relationship between facilitating conditions and satisfaction among the students in using Facebook as Social Interaction Tool.	H4: There is a positive correlated relationship between facilitating condition and satisfaction among the students in using Facebook as Social Interaction Tool.
RO5: To investigate the relationship between satisfaction and behaviour intention among the	H5: There is a positive correlated relationship between satisfaction and behaviour intention

students in using Facebook as Social Interaction Tool.	among the students in using Facebook as Social Interaction Tool.
--	--

## METHODS

This present study applied the quantitative method in order to collect the data among the students. The questionnaire in this study was developed based on the literature review. It was divided by two parts with a total of 52 questions. First part is about demographic of respondents meanwhile second part is about the user acceptance factors and satisfaction. The questionnaires was finalized and distributed by the researcher to 110 respondents in the age range of 18 to 24 years old. However, only 100 usable questionnaires can be used for pilot test. The data gathered was analyzed by applied statistical method of analysis using SPSS. In order to evaluate the relationship between performance expectancy, effort expectancy, social influence and facilitating conditions with satisfaction were analyzed by applied the Pearson correlation method.

## INSTRUMENT DESIGN

The questionnaire in this study was constructed based on the comprehensive literature review and discussions with the experienced academicians. Part 2 implements the 5-point Likert scale in category of level of agreement. Likert scale is the rating scale and specifically used to measure the how strongly respondents disagree and agree towards independent variables and dependent variable. According to DeVellis (2012), Likert scale is generally used for evaluating opinions, beliefs and attitudes among the respondents. Table 2 summarizes the items that used to evaluate each of the latent variables in this study.

**Table 2. Description of variables used in the questionnaire**

Variable name	Source	No. of Items
Performance Expectancy	Venkatesh et al (2003); Borrero, Yousafzai, Javed and Page (2014)	6
Effort Expectancy	Venkatesh et al (2003); Borrero, Yousafzai, Javed and Page (2014)	6
Social Influence	Venkatesh et al (2003); Borrero, Yousafzai, Javed and Page (2014)	5
Facilitating Conditions	Venkatesh et al (2003); Borrero, Yousafzai, Javed and Page (2014)	6
Content	Monideepa, Tu, Ragu-Nanthan (2010)	4
Accuracy	Monideepa, Tu, Ragu-Nanthan (2010)	4
Format	Rauniar, Rawski, Johson & Jie Yang (2013)	5
Timeliness	Rauniar, Rawski, Johson & Jie Yang (2013)	4
Behavioural Intention	Venkatesh et al (2003); Borrero, Yousafzai, Javed and Page (2014)	5

## RELIABILITY

According to Sekaran (2003), the reliability value more than 0.8 is consider good, 0.7-0.79 acceptable meanwhile less than 0.6 is considered to be poor. Based on table 3, it can be proved that the internal consistency reliability of measures used in this study is acceptable because the Cronbach's Alpha value for the variables and dimensions in this study ranged from 0.722 to 0.911.

**Table 3. Reliability Test**

Variables /Dimensions	Number of Items	Cronbach's Alpha ( ) (n=100)
Performance Expectancy	6	0.802
Effort Expectancy	6	0.838

Social Influence	5	0.754
Facilitating Conditions	6	0.778
Behavioural Intention	5	0.748
All Satisfaction Dimensions	17	0.911
Content	4	0.768
Accuracy	4	0.741
Format	5	0.766
Timeliness	4	0.722
Behavioural Intention	5	0.748

## DEMOGRAPHIC ANALYSIS

Table 3 indicates the demographic analysis result. Almost all of the respondents involved in this study are 59% female and 41% male. Majority of the respondents are 21-23 years old (50%), followed by 15% respondents in the age of 24-26 years old, 10% respondents in the age of 30-32 and 33-35 years old, 9% respondents in the range of 27-29 years and lastly 9% respondents are 18-20 years old. Almost all of the respondents are Malay (46%), 26% respondents are Indian, 25% respondents are Chinese and 3% respondents are others. Interestingly, majority of respondents (52%) spend 1 until 3 hours on FB a day, followed by 26% respondents spend 4 until 6 hours, 11 respondents spend less than 1 hour on FB, 10% respondents spend 7 until 9 hours spend on FB and only 1 respondents spend 10 hours and above on FB. As matter fact, 54% respondents have an experience of using FB about 5 until 6 years old, 27% respondents about 3 until 4 years, 12% respondents about 7 until 8 years, 4% respondents about 1 until 2 years and one respondents have an experience of using FB. In terms of numbers of friends on FB, majority (38%) of respondents have 1001 until 1400 friends on FB, followed by 17% respondents have 601-1000 friends and others can be seen as stated in table 3. Interestingly when the results were analyzed, it can be easily seen as predicted that the majority of respondents (98%) mainly agree that FB increased the social interaction between them and surroundings.

## CORRELATION ANALYSIS

This section shows the findings based on the Pearson correlations analysis. Table 4 indicates the correlation analysis between the user acceptance factors with satisfaction and behavioural intention in using FB as social interaction tool.

**Table 4. Correlations**

		Satisfaction	BI
PE	Pearson Correlation Sig. (1-tailed) N	<b>.772**</b> <b>.000</b> <b>100</b>	
EE	Pearson Correlation Sig. (1-tailed) N	<b>.600**</b> <b>.000</b> <b>100</b>	
SI	Pearson Correlation Sig. (1-tailed) N	<b>.649**</b> <b>.000</b> <b>100</b>	
FC	Pearson Correlation Sig. (1-tailed) N	<b>.552**</b> <b>.000</b> <b>100</b>	
Satisfaction	Pearson Correlation Sig. (1-tailed) N		<b>.543**</b> <b>.000</b> <b>100</b>

\*\* . Correlation is significant at the 0.01 level (1-tailed).

As shown on Table 4, it can be concluded that the research hypotheses H1 ( $r = 0.772$ ,  $p < 0.01$ ), H2 ( $r = 0.600$ ,  $p < 0.01$ ), H3 ( $r = 0.649$ ,  $p < 0.01$ ) and H4 ( $r = 0.552$ ,  $p < 0.01$ ) are supported as there are a positive correlated relationship between performance expectancy, effort expectancy, social influence, facilitating conditions and satisfaction in using Facebook as social interaction tool. The correlation is significant at the 0.01 (1-tailed). Generally, the finding results for the research hypotheses from H1 until H4 seem similar with the prior studies' finding results (Chan, Thong, Venkatesh, Brown, Hu, Tam, 2010; Maillet, Mathieu & Sicotte, 2015; Napitupulu & Patria, 2013; Lai & Pires, 2015; Ling & Islam, 2015). The H5 ( $r = 0.552$ ,  $p < 0.01$ ) also supported as there is a positive correlated relationship between satisfaction and behavioural intention in using Facebook as social interaction tool. This result consistent with the previous studies' result were conducted by the researchers (Roca, Chiu & Martinez, 2006; Shi, Lee, Cheung & Chen, 2010; Lai & Pires, 2010) in others scope and types of IS. Table 5 indicates the results of the research hypotheses.

**Table 5. The Research Hypothesis**

No	The Research Hypothesis	The Results
H1	There is positive correlated relationship between Performance Expectancy and Satisfaction	Supported
H2	There is positive correlated relationship between Effort Expectancy and Satisfaction	Supported
H3	There is positive correlated relationship between Social Influence and Satisfaction	Supported
H4	There is positive correlated relationship between Facilitating Conditions and Satisfaction	Supported
H5	There is positive correlated relationship between Satisfaction and Behavioural Intention	Supported

## DISCUSSION AND CONCLUSION

The study attempts to evaluate five research objectives that investigate the relationship between performance expectancy, effort expectancy, social influence and facilitating conditions with satisfaction besides the relationship between satisfaction and behavioural intention among the adolescents in using Facebook as social interaction tool in virtual life. The data was gathered by distributing 110 questionnaires among the respondents in the age cohort of Malaysian 18 until 35 years old. Only 100 usable questionnaires were used to analyses the reliability of measures used in this study and also the relationship between variable by using Pearson correlation method. The result of this study found that there are positive correlated relationships between performance expectancy, effort expectancy, social influence and facilitating conditions with satisfaction among the adolescents in using Facebook as social interaction tool in virtual life. Meanwhile there are positive correlated relationship between satisfaction and behavioural intention in using Facebook among the adolescents as social interaction tool in virtual life.

## REFERENCES

- Au, N., Ngai, E. & Cheng T. (2002). A critical review of end-user information system satisfaction research and new research framework, *Omega*, 30(6), 451-478.
- Ayu, A. R. R., & Abrizah, A. (2011). Do you Facebook? Usage and applications of Facebook pages among academic libraries in Malaysia. *International Information & Library Review*, 43(4), 239–249. doi:10.1016/j.iilr.2011.10.005
- Chan, F.K.Y., Thong, J.Y.L., Venkatesh, V., Brown, S.A., & Tam, K.Y. (2010). Modeling citizen satisfaction with mandatory adoption of an e-government technology, *Journal of the Association for Information Systems*, 11(1), 520-548.

- DeVellis, R. F. (2012). *Scale development: Theory and applications* (3rd. ed.). Chapel Hill, U.S.A.: Sage Publication.
- Doll, W. J., & Torkzadeh, G. (1988). The measurement of end-user computing satisfaction. *MIS Quarterly*, 12(6), 256-274.
- Ebizmba.com (2015). Top 15 Most Popular Social Networking Sites. Retrieved from (<http://www.ebizmba.com/articles/social-networking-websites>).
- Facebook (2015). Company Info. Retrieved from <http://newsroom.fb.com/company-info/>
- Lai, C.S.K. & Pires, G. (2010). Testing of a model evaluating e-Government portal acceptance and satisfaction. *Information Systems Evaluation*, 13(1), 35-46.
- Lee, Y., Kozar, K. A., & Larsen, K. R. (2003). The technology acceptance model: past, present, and future. *Communications of the Association for Information Systems*, 12(1), 50.
- Lin, P.C., Hou, H.T., Wang, S.M., & Chang, K.E. (2013). Analyzing knowledge dimensions and cognitive process of a project-based online discussion instructional activity using Facebook in an adult and continuing education course. *Computers & Education*, 60, 110-121.
- Ling, C.H. & Islam, M.A. (2015). User satisfaction towards online banking in Malaysia. *International Business Management*, 9 (1), 15-27.
- Maillet, E., Mathieu, L., & Sicotte, C. (2014). Modeling factors explaining the acceptance, actual use and satisfaction of nurses using an Electronic Patient Record in acute care settings: An extension of the UTAUT. *International Journal of Medical Informatics*, 84(1), 36-47.
- Napitupulu, T.A. & Patria, S.H.J (2013). Factors that determine e-electronic medical records users satisfaction: A case of Indonesia. *Journal of Theoretical and Applied Information Technology*, 58(3), 499-504.
- Ong, C.S., Day, M.Y. & Hsu, W.L. (2009). The measurement of user satisfaction with question answering systems. *Information & Management*, 46, 397-403.
- Roca, J.C., Chiu, C.M. & Martinez, F.J. (2006). Understanding e-learning continuance intention: An extension of the technology acceptance model. *International Journal of Human-Computer Studies*, 64, 683-696.
- Seddon, P. (1997). A respecification and extension of the DeLone and McLean's model of IS success. *Information Systems Research*, 8(3), 240-253.
- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). New York: John Wiley & Sons, Inc
- Shi, N., Lee, M.K.O., Cheung, C.M.K. & Chen, H. (2010). The continuance of online social networks: How to keep people using Facebook? *Proceedings of 43rd Hawaii International Conference on System Sciences*.
- Socialbakers (2014). Retrieved from <http://www.socialbakers.com/statistics/facebook/pages/total/>
- Subramaniam, B. (2014). On the social media circuit. Retrieved on December, 17, 2014 from <http://www.thestar.com.my/News/Education/2014/01/05/On-the-social-media-circuit/>
- Venkatesh, V., Morriss, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, 425-478.
- Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. *Information Systems Research*, 16 (1), 85-102. doi: 10.1287/isre.1050.0042.