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An assessment of muslim user behaviour on Facebook utilizing the UTAUT model

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ABSTRACT

Facebook is a popular social networking tool that has changed the behaviour and daily interactions of Muslims. The present investigation employs a quantitative methodology for data collection by disseminating a survey over several social media platforms. The present study employed the purposive sampling strategy to effectively acquire a sample size of 385 individuals residing in the Klang Valley region. This study utilises the unified theory of acceptance and use of technology (UTAUT) framework to examine the potential influence of Performance expectancy, effort expectancy, social influence, and behaviour intention on the Facebook behaviour of individuals who identify as Muslim. The findings of the study indicate that there is a relationship between performance expectancy (PE) and social influence (SI) and the level of Muslim Facebook engagement. Moreover, a significant correlation exists between age and both PE and effort expectancy (EE). In contrast, age exhibits a negative correlation with both experience and gender. Anticipated outcomes of future research endeavours include the creation of an innovative social media platform specifically tailored for the Muslim community, including the principles of Muslim centred user interface design (MCUID).

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1. INTRODUCTION

Technological advancements affect communication by changing how people communicate worldwide through social media. Social media has helped people find a better mode of communication through smartphones and computers by making it more efficient and accessible. Facebook is Malaysia's most popular and preferred social media platform [1]. In this modern era, social media is widely used among Muslims daily, allowing people to communicate and share information quickly. However, false and inaccurate information may have a negative impact on the community [2]. Microsoft has conducted a 2020 digital civility index (DCI) survey to evaluate the influence of negative behaviour and online interactions among Malaysian on social media platforms. This annual survey found that social media, especially Facebook, is the most common online platform for unmannerly behaviour. According to [3], the score for Malaysia is high and worsened, showing that Malaysian are experiencing negative online interactions. This survey found that spreading rumours, false information, personal attacks and negative comments were the most frequent negative behaviour during the COVID-19 pandemic [4]. In this digital world, the increasing use of social media affects users' attitudes to behave mannerly. The messages of Islam could help educate the moral system to promote peace and harmony in our lives. Therefore, good messages must be shared to

promote the benefit, while the wrong messages should be avoided [2]. The trend of social media usage among Muslims increased with other societies. Therefore, awareness programs must be conducted in Muslim society to address social media's positive and negative issues. Every technological product or development has been beneficial for Islam. However, all can be used for useful and negative purposes [5].

2. PROBLEM STATEMENT

Recently, Facebook has been the subject of research into user behaviour. Cheevasuntorn *et al.* [6], researchers in the study prioritise factors influencing teenagers' posting and sharing behaviour on Facebook. In addition, the study should include an assessment of the behaviour of the elderly and users of various ages. Bakar *et al.* [2] mentioned, religion significantly affects an individual's negative behaviour. Furthermore, Rashid *et al.* [7] asserted that social media positively and negatively affect religion. As a result, it would be appealing to conduct a study to assess the relationship between user behaviour on social media and religion. Islam is concerned with purpose and means of technology, and Muslims should utilise the knowledge for the benefit of the community, and the product should contribute value system of Islam. Muslim users could practice good manners when interacting with computers in daily life [8], [9]. Mehad *et al.* [10], conducting more research on the Muslim community in the digital world would be beneficial. Facebook enables researchers to obtain correct measures of user behaviours, such as the number of likes, comments, and shares [11]. As a result, the behaviour of liking, commenting and sharing has evolved into a modern way of life [12].

Social media is vital as it significantly impacts the Muslim community [5]. Nevertheless, most issues on social media activities and behaviour could affect the Muslim community. Many people are becoming frustrated due to the misuse of technology. Currently, past research on social media only discussed social impact in general. Moreover, there is a lack of research on Islam and social media conducted by sociologists and computer specialists [13]. Salim [14] suggested using the unified theory of acceptance and use of theory (UTAUT) model for social media that involve the community. Therefore, this research aims to evaluate Muslim behaviour on Facebook using the UTAUT model.

3. METHOD

Klang Valley is chosen as the research area for this research. The research area consists of three states in Klang Valley: Kuala Lumpur, Selangor and Putrajaya. This area is the most heavily urbanised and most populated in Malaysia. According to the Departments of Statistics Malaysia data for the first quarter of 2021, the total population of Klang Valley, consisting of Selangor, Kuala Lumpur and Putrajaya, is about 8,442,500 peoples. In addition, as much as 90% of Malaysian have social media accounts, and Klang Valley has high internet access and frequency of use [15]. The purposive sampling method is used for this research because the population is considered to have an equal probability of inclusion in the sample. This method is easily understood and has projectable results [16]. As the participants have an equal chance to be included in the sample, the result is unbiased. This study included Muslim Facebook users aged 18 and up who lived in Klang Valley (Kuala Lumpur, Selangor, and Putrajaya). Respondents must have a Facebook account and have used Facebook for at least two years.

The modified UTAUT method is used in this research. UTAUT model describes the intention to use technology and synthesis of eight theoretical models from psychological and sociological theories used in the literature to explain this behaviour [17]. Five primary constructs are used: performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioural intentions, as described:

- Performance expectancy (PE): the degree to which an individual believes that using the system will help him or her to attain gains in job performance [18].
- Effort expectancy (EE): the degree of ease associated with using the system [19].
- Social Influence (SI): the degree to which an individual perceives that important others believe he or she should use the new system [20], [21].
- Facilitating, conditions represent the extent to which a consumer believes that resources exist and they facilitate the task completion using IS [22].
- Behavioural intentions (BI): to perform a behaviour resulting from conscious decision-making [23]. As the conative component of attitude, it is usually assumed that this conative component is related to the attitude's affective component.

The primary purpose of this research is to evaluate Muslim behaviour on Facebook. It consists of two objectives: first, to identify factors influencing Muslim behaviours on Facebook and second, to examine the relationship between variables influencing Muslim behaviour on Facebook. A research instrument is a tool for gathering data for a study. The research instrument for this study will be an online survey. A survey questionnaire will be created in Google Forms to collect data. The data was collected using a survey

questionnaire adapted from [24]. The first section of a survey questionnaire contains demographic information about the participants. The second section, on the other hand, consists of 14 questions that assess the research constructs discussed in the research model using a seven-point Likert scale ranging from 1 to 7. (from strongly opposed to strongly agreed). The pilot study included 39 people with a Cronbach's Alpha value of 0.63 states that reliability numbers greater than 0.6 are acceptable. This means that the Alpha coefficient of the pilot study was acceptable, and the questionnaire was reliable.

4. RESULTS AND DISCUSSION

The total number of respondents is 385, with 173 male and 212 female respondents. This study focuses on Muslim users aged 18 and up. With 107 respondents (27.8%), the majority of respondents are aged 36 and up. They were followed by 100 respondents (26.0%) ranging in age from 24 to 29 years old. About 99 (25.7%) participants were between 18 and 23. Finally, 79 respondents were between the ages of 30 and 35. Furthermore, the finding shows that most respondents have more than four years of experience using Facebook, comprising 355 respondents (92.2%).

Factor analysis is used to identify factors influencing Muslim's behaviour on Facebook. The purpose of factor analysis is to group variables with large loadings (correlations) for the same factor. Table 1 shows the factor loading after rotation. For example, component 1 represents performance expectancy (PE) with three items. Component 2 represents effort expectancy (EE) with three items, component 3 represents social influence (SI) with three items, and component 4 represents facilitating conditions (FC) with three items. Following are the result of the factor analysis.

Table 1. Rotated component matrix[a] component

	1	2	3	4
BI1	.842			
BI2	.833			
BI3	.806			
BI4	.715			
BI5	.617			
EE1		.808		
EE2		.640		
EE3		.610		
SI1			.793	
SI2			.736	
SI3			.710	
PE1				.832
PE2				.694
PE3				.605

Based on the factor analysis in Table 1, this study proposes a modified and adapted conceptual framework and consists of four variables. Independent variables in this research are performance expectancy, effort expectancy and social influence. The dependent variable in this research is behavioural intention (BI). The influence of interest in use (BI) on use (use behavioural) is ignored based on the consideration that interest in use (BI) as a predictor of use (use behavioural) has been widely accepted in various user acceptance models [25]. According to [26], mentioned that in the presence of effort expectancy constructs, the facilitating condition constructs become non-significant in predicting intention. Thus, facilitating conditions could be removed from the model. Furthermore, [27] stated that several potentially significant relationships hypothesised that some relationships could be removed from the UTAUT model because it may not be appropriate in all situations. Some constructs that may be important in explaining information system acceptance could be removed. The moderator variables of this research were gender, age and experience. One moderator variable in the UTAUT method was ignored in this research. Voluntariness of use for Facebook is the mandatory use of a system once the conditions the use of Facebook is voluntary because this system is used for social activities such as liking, commenting and sharing. In order to avoid possible ambiguity, this study removes the voluntariness of use from the moderator variable. Therefore, the UTAUT model is used for this research to evaluate the influencing factor of Muslim behaviour. The following proposed model is adapted and modified from previous models of UTAUT.

The hypothesis is a temporary answer that must be verified to a problem, still an assumption [24]. Based on the UTAUT model in Figure 1, twelve hypotheses (12) were formulated and tested (H1-H12). Spearman correlation is used to determine the relationship or correlation between two variables. Spearman's rank correlation is a non-parametric that can be used when data is not normally distributed or when outliers

exist. Spearman correlations are always between -1 and +1, which is appropriate for all variables except nominal ones. On the other hand, Pearson correlations are usually the best option when both variables are metric or dichotomous [28]. Table 2 depicts an examination of a Spearman correlation using SPSS version 25 software to examine the relationship between the UTAUT constructs. These constructs represented the factors influencing Muslims' Facebook behaviour. At the 0.05 level, the results show that effort expectancy and social influence significantly correlate with BI (2-tailed). According to the UTAUT model, these are the two primary constructs (effort expectancy and social influence) that are considered influential factors and influence participants' acceptance of Facebook.

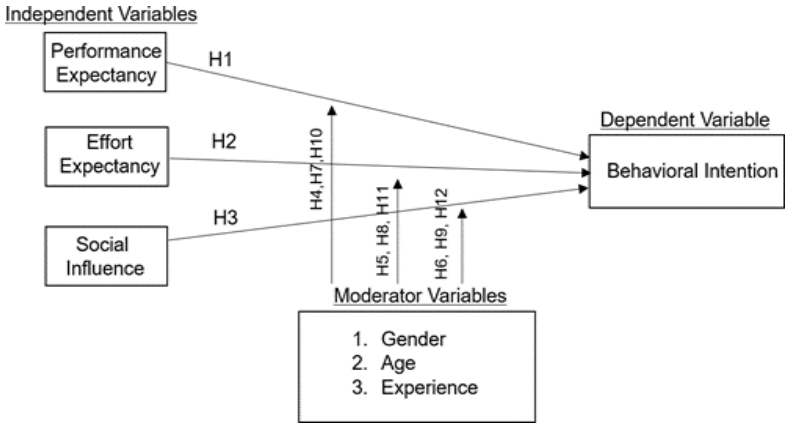

Figure 1. Adapted and modified research model

Table 2. The result of spearman correlation

			PE	EE	SI	BI
Spearman's rho	PE	Correlation coefficient	1.000	.377**	.033	-.106*
		Sig. (2-tailed)	.	.000	.522	.038
		N	385	385	385	385
	EE	Correlation coefficient	.377**	1.000	.006	-.099
		Sig. (2-tailed)	.000	.	.899	.051
		N	385	385	385	385
	SI	Correlation coefficient	.033	.006	1.000	.424**
		Sig. (2-tailed)	.522	.899	.	.000
		N	385	385	385	385
	BI	Correlation coefficient	-.106*	-.099	.424**	1.000
		Sig. (2-tailed)	.038	.051	.000	.
		N	385	385	385	385

Hypotheses (H1, H3, H7, H8) are supported, indicating that they influence Muslims' behaviour on Facebook, whereas hypotheses (H2, H4, H5, H6, H9, H10, H11, H12) show no influence on Muslims' behaviour on Facebook. The hypothesis is summarised:

H1 Performance expectancy has an influence on Muslim behaviour on Facebook
H2 Effort expectancy has no influence on Muslim behaviour on Facebook
H3 Social influence has an influence on Muslim behaviour on Facebook
H4 Performance expectancy has no influence on Muslim behaviour on Facebook, which is moderated by gender
H5 Effort expectancy has no influence on Muslim behaviour on Facebook, which is moderated by gender
H6 Social influence has no influence on Muslim behaviour on Facebook, which is moderated by gender
H7 Performance expectancy has an influence on Muslim behaviour on Facebook, which is moderated by age
H8 Effort expectancy has an influence on Muslim behaviour on Facebook, which is moderated by age
H9 Social influence has no influence on Muslim behaviour on Facebook, which is moderated by age
H10 Performance expectancy has no influence on Muslim behaviour on Facebook, which is moderated by experience
H11 Effort expectancy has no influence on Muslim behaviour on Facebook, which is moderated by experience
H12 Social influence has no influence on Muslim behaviour on Facebook, which is moderated by experience

5. CONCLUSION

The study's findings indicate that performance anticipation and social influence are two prominent aspects that shape the behaviour of Muslims on Facebook. Moreover, there exists a strong positive correlation between age and PE as well as EE. Conversely, age exhibits an inverse relationship with experience and gender. Consequently, scholars specialising in social media could employ this research to do a comparative analysis of Muslim behaviour in relation to other religious groups, while also incorporating a wide range of social media platforms for future investigations. The availability of research conducted by scholars who actively contribute to the Muslim community should be considered as a valuable option.

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