

RESEARCH PAPER

Factors that Influencing Tertiary Students' Trust in Facebook's Social Networking Services in Malaysia: A Structural Equation Modelling Approach

Zahayu Md Yusof^{1,2*}, Masnita Misiran^{1,3}, Nurul Izzati Binti Hasnun¹,
Nurul Aziera Binti Zainol Abidin¹ and Yi Sean Ong¹

¹School of Quantitative Sciences, Universiti Utara Malaysia, 06010 Kedah, Malaysia

²Institute of Strategic Industrial Decision Modeling, School of Quantitative Sciences, Universiti Utara Malaysia, 06010 Kedah, Malaysia

³Centre for Testing, Measurement and Appraisal, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia

*Corresponding author: zahayu@uum.edu.my

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Abstract

Social networking services (SNS) is a platform that undertakings as a connector among individuals in this digital era, in particular between family, friends, and colleagues. This study was conducted to determine the factors influencing users' trust in social networking services (SNS) of Facebook and construct the structural of inter-relations between the factors influencing users' trust in SNS of Facebook. Trust is a crucial factor to be considered when information is being disseminated. Genuine information that can resonate and relied upon audience is necessary. A conceptual model is developed with four factors such as effort expectancy, social influence, privacy concerns and perceived risks. Trust acts as a mediator and continuance intention as a dependent variable in the model. Data were collected from 770 tertiary students in public and private universities in Malaysia by using a structured questionnaire. The questionnaire was design in online form and distributed via online platform too. Convenient sampling method was adopted for data collection purposes. By using structural equation modelling (SEM), the findings revealed that there are three factors which are effort expectancy, social influence and perceived risks that significantly affected the users' trust of Facebook. Besides, the factor, privacy concerns was significantly influencing the perceived risks of users. The continuance intention in Facebook utilization was significantly affected by users' trust.

Keywords: Social Networking Services (SNS); Trust; Continuance Intention; Structural Equation Modelling (SEM)

INTRODUCTION

Social networking services (SNS) is a platform that acts as a connector among people in this digital era, in particular between family, friends, and colleagues (Medaglia, Rose, Nyvang & Sabo, 2009). Some popular SNS platform includes Facebook (*mainly focus on socialization among friends and*

family), LinkedIn (a platform more specific for career specialisation), and Researchgate (centred on researcher's network). An individual's network can be expanded by exchanging contacts and groups with existing friends or acquaintances. This indicates that every relation created has the potential to generate new node since new users signify the increase of the network. Once a user created new connections, the other users connected to this user may be notified, thus expanding the networks and exchanging particulars, resulting in network economy. This technology keeps expanding, in particular in the time of the Covid-19 pandemic crisis, in which more emerging platforms are getting noticed.

There is noticeable applicability of social media, not only just connecting people. This platform can be used to acquire certain imperative source of data, knowledge, and news. In addition, this platform can become a medium of business media, recruiting mechanism, customer support channel and promoting agent. As there is extensive platform that use the SNS technology in this digital era, in this study, we mainly focus our attention to the general SNS socialization platform, in particular the Facebook, as this segment is more relatable to wider population.

Research Model

Figure 1 shows the path between Effort Expectancy (EE) to Trust (TR) and Continuance Intention (CI), Social Influence (SI) to Trust (TR) and Continuance Intention (CI), Privacy Concern (PC) to Trust (TR) and Perceived Risk (PR), Privacy Concerns (PC) to Perceived Risks (PR), Perceived Risk (PR) to Trust (TR) and Continuance Intention (CI) and Trust (TR) to Continuance Intention (CI).

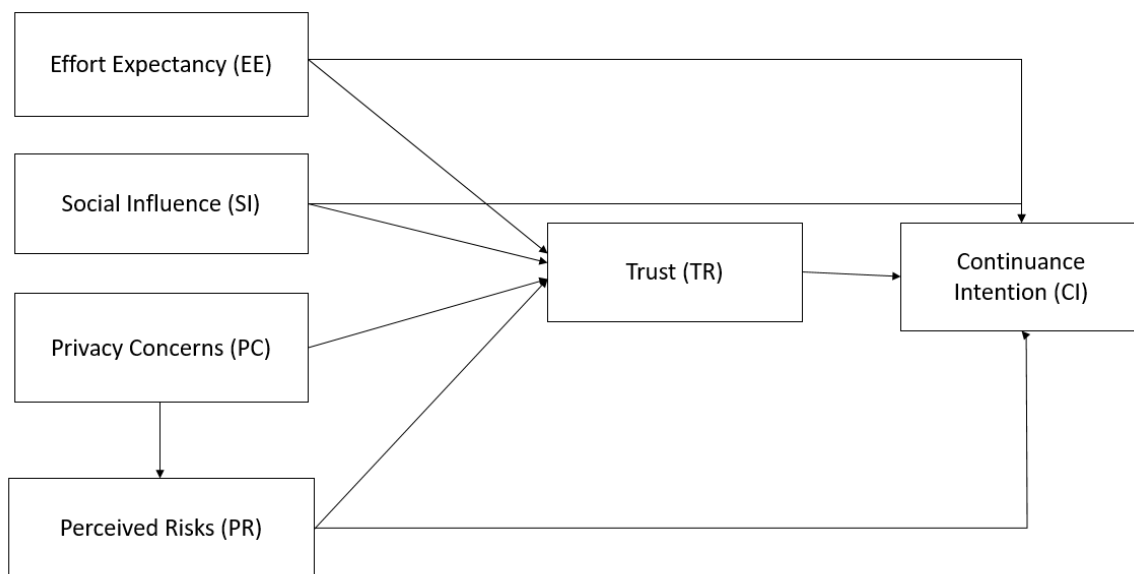


Figure 1. Hypothesis build for all path direction.

Table 1 shows the hypothesis that has been constructed for each path of all the variable shows in Figure 1.

Table 1. Hypothesis Paths.

Hypothesis	Path	
H_1	EE \rightarrow TR	There is a relationship between effort expectancy and trust for using Facebook.
H_2	EE \rightarrow CI	There is a relationship between effort expectancy and continuance intention for using Facebook
H_3	SI \rightarrow TR	There is a relationship between social influence and trust for using Facebook.
H_4	SI \rightarrow CI	There is a relationship between social influence and continuance intention for using Facebook.
H_5	PC \rightarrow TR	There is a relationship between privacy concerns and trust for using Facebook.
H_6	PC \rightarrow PR	There is a relationship between privacy concerns and perceived risk for using Facebook.
H_7	PR \rightarrow TR	There is a relationship between perceived risk and trust for using Facebook.
H_8	PR \rightarrow CI	There is a relationship between perceived risk and continuance intention for using Facebook.
H_9	TR \rightarrow CI	There is a relationship between trust and continuance intention for using Facebook.

LITERATURE REVIEW

In 2020, Facebook is still the leading platform in this market segment with 60.6% internet users, with current active users of 2.60 billion monthly globally and 1.73 billion of its users visiting the platform daily. To date, Facebook is still the biggest social media in 2020 (Kellogg, 2020). The benefits of this platform however also come with its threats. The trust and privacy are crucial factors to consider when information is being disseminated. Genuine information that can resonate and relied upon audience is necessary. Yokoyama and Sekiguchi (2014) showed that tensions did exist among users in terms of how confidential information are revealed in social media. The methods of exchanging personal information via SNS pose alarming questions about privacy problems and the risks. For example, Facebook's trust was viewed as a technology and related individual trust that moderated the privacy are of concerns for the users (Tan, Qin, Kim & Hsu, 2012).

In addition, the threat of frauds is also common. Frauds in the SNS are mostly refers to wider activities, in which result in abuse, financial loss, loss of credibility of a person or an entity, loss of confidence in the system or an individual and others. The apparent availability of this knowledge makes accounts in SNS is the most tempting tools among hackers. In response to these type of threats, SNS sites have made major strides to discourage identity theft and preserve the privacy of consumers. Facebook for example, has taken initiative to track regular devices and IP addresses used in each of its accounts. When an unusual device or IP address is used to sign in to an account, the users may be prompted to answer any of the confidential questions (Constine, 2010) or enter authentication code that is uniquely sent to the mobile device of account owner (Constine, 2012) in order to verify whether the login is authentic. As such, businesses that use Facebook fan pages or

other tools provided by this platform to promote their business growth should in particular address these issues (Jang, Chang & Chen, 2015).

Although the threats are prominent, the benefits of this platform cannot be ignored. With the pool of expansive users under their care, the marketing tools should be utilized. This industry is booming and can become important players to boost local economy through the domestic demand and supply. Thus, it is important to understand the factors that influence users' trust in SNS platform, in particular for Facebook. In this study, we will determine the factors that influencing users' trust in SNS for Facebook and further constructing its structural inter-relations factors. The study is mainly focus on university students in Malaysia, whereby 65% of Facebook users are under age of 35 years (StatisticSolutions, 2019), thus it is most important to conduct more specific study that cater to this age group. In addition, Facebook is one of the medias that has the most users worldwide.

METHODOLOGY

Data Collection

A questionnaire was constructed for data collection. This questionnaire consists of thirty-three items. Online survey platform (i.e. Google Form) was used to collect the information. The link of the Google Form was shared through the application of WhatsApp and Facebook. A convenience sampling method was adopted to identify the sample/respondents for this study. A timespan of five weeks was spent in collecting data from the universities' students in Malaysia. The targeted respondents were students from public and private universities. The total responses obtained during this period are 770.

Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) is widely used in social sciences and can be viewed as a combination of factor analysis, path analysis and regression modelling. SEM provides two competent model in its analyzing engine: (1) the measurement model and (2) the structural model

1. The Measurement Model

The measurement model tests the validity and reliability of the model. There are few assumptions to be fulfilled before continuing with SEM. The assumptions are regarding the validity and reliability of the data. It is important to have the satisfactory of validity and reliability in the measurement model before proceeding to find the significant relationship in the structural model. Fornell and Larcker (1981) proposed criterion that has been commonly adopted to assess the degree of shared variance between the latent variables of the model through composite reliability (CR) and average variance extracted (AVE).

2. Composite/ Construct Reliability

Composite reliability (CR) measure overall scale reliability. CR value usually used because of its better assessment of internal consistency (Peterson, & Kim, 2013). These values mean to retain the standardized loading of observed variable, with every construct need to be calculated and compared with the cut-off value of 0.6 (Muhamad Safiih & Nor Azreen, 2016). To qualify the CR, the minimum threshold is 0.6. Meanwhile, Cronbach alpha (the average measure of internal consistency

and item reliability) is preferred when EFA is used for factor extraction. For the calculation of composite reliability, the formula is as below:

$$CR = \frac{\text{Sum of standardized loadings}^2}{\text{Sum of standardized loadings}^2 + \text{Sum of indicator measurement errors}}$$

3. Average Variance Extracted (AVE)

Average Variance Extracted (AVE) measures the amount of variance captured by a construct in relation to the amount of variance that is due to measurement error. Bagozzi and Yi (1988) emphasize that the value should be 0.5 or higher. The average of the R^2 s for items within a factor. AVE Formula was shown as below:

$$AVE = \frac{\text{Sum of standardized loadings squared}}{\text{Number of factor loadings}}$$

4. Evaluating the Fitness of a Model

Through Confirmatory Factors Analysis (CFA), this study is able to identify which variables are measured in relation to which latent variable. In addition, CFA can also determine how many factors are needed. Besides, CFA is a tool that is often used by researchers in measuring and confirming whether to rejects or accept the hypotheses (refer Figure 1) (StatisticSolutions, 2019).

The performance of the proposed model will be accessed by using goodness of fit indexes. This measurement is divided into three categories, namely as incremental fit (CFI, IFI, AGFI), absolute fit (RMSEA, GFI) and parsimonious fit (Chisq / df). According to (Afthanorhan, 2014), researchers need to ensure that all categories are measured to prove that the proposed model is fit and acceptable. For incremental fit, the Comparative Fit Index (CFI) need to be 0.90 and above. Bentler (1989) stated that CFI is 0.95 is a good fit. Then, the value of Tucker-Lewis Index (TLI) need to more than 0.90 and based on (Bentler & Bonett, 1980), if the TLI equal to 0.95, it shows that the model is a good fit. Next, Normed Fit Index (NFI) must be higher than 0.80. According to Reinard (2006), the NFI must equal to 0.95 in order to achieve the model fit.

For absolute fit, Root Mean Square Error of Approximation (RMSEA) less than 0.08 (Browne & Cudeck, 1993) need to be found. According to Browne and Cudeck (1993), range between 0.05 until 1.00 is acceptable. It shows how far the model hypothesis differs from the perfect model. Joreskog and Sorbom (1993) stated that the Goodness of Fit Index (GFI) must be 0.90 or greater, with GFI equal to 0.95 means that this model achieved to be a good fit model. Next, the Chi-square p -value result must be less than 0.05 in order to achieve the model fit requirement (Awang, 2012). But, for the chi square p value, it very sensitive with in particular with the sample size.

For parsimonious fit, the Chi Square will be divided with degree of freedom which the value needs to be 5.0 and below (Awang, 2012). While (Bagozzi & Yi, 1988) mentioned that the value between 1.0 and 3.0 is considered good. Thus, all the type of goodness of fit need to be achieve by the researchers in order to develop a fit model.

5. The Structural Model

Once all the factors are already fit, the structural of inter-relations between the factors that influencing users' trust in social networking services (SNS) for Facebook can be investigated. We followed (StatisticSolutions, 2019) of multiple regression and factor analysis. Thus, this study used SEM in order to analyze the relationship between measured variables and latent constructs. The structural model test was carried out to examine the hypothesized conceptual framework. Then, the measurement model is transformed to the structural model in order to test the relationships between constructs (Hair *et al.*, 2010). The main benefit of using this method is that it does concurrent testing of all the relationships in one model and thus gives a better view of relationships between constructs.

RESEARCH FINDINGS

In this study, a total of 770 respondents have been participated. All of the respondents are tertiary students from public and private universities in Malaysia and they were engaged in this survey voluntarily. Table 2 illustrates the demographic data of respondents. Basically, around 60% of the respondents are female. Majority of the respondents is in between 21 -25 years old. There are 54.8% Malay respondents, 35.8% Chinese and the rest are Indian. 79.9% of respondents is in bachelor's degree Program. Finally, there are balance number of data collected from private and public universities.

Table 2. Demographic Profile.

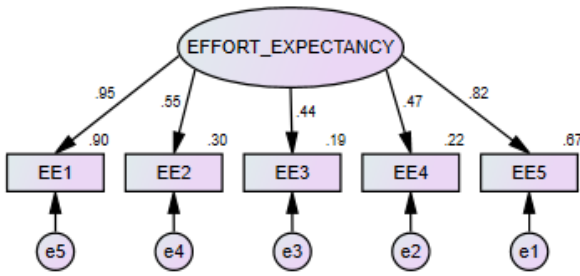
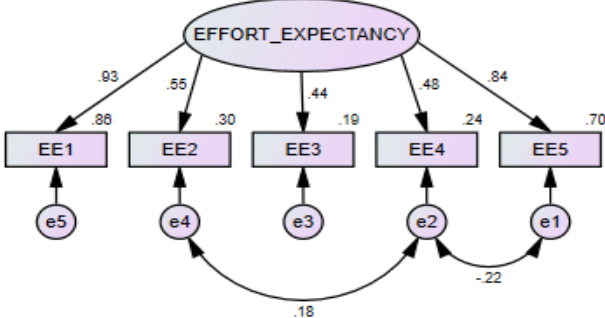
Demographic Profile	N	%
Gender		
Female	459	59.6
Male	311	40.4
Total	770	100.0
Age		
Below 20 years old	95	12.3
21-25 years old	611	79.4
26-30 years old	64	8.3
Total	770	100.0
Race		
Malay	422	54.8
Chinese	276	35.8
Indian	72	9.4
Total	770	100.0
Education		
Diploma/Certificate	74	9.6
Bachelor's Degree	615	79.9
Master's Degree	81	10.5
Total	770	100.0
University		
Private University	385	50.0
Public University	385	50.0
Total	770	100.0

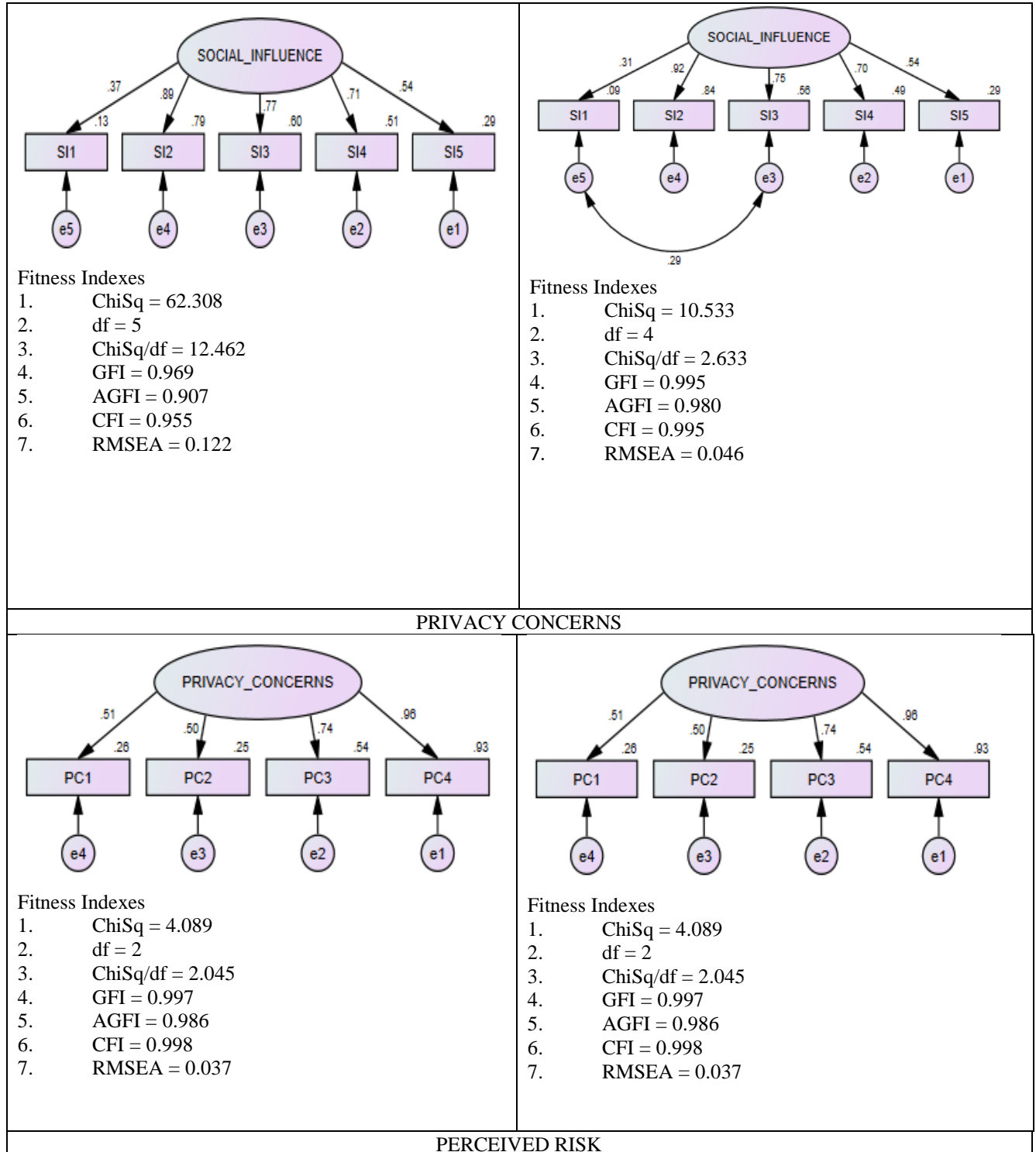
Structural Equation Modelling (SEM)

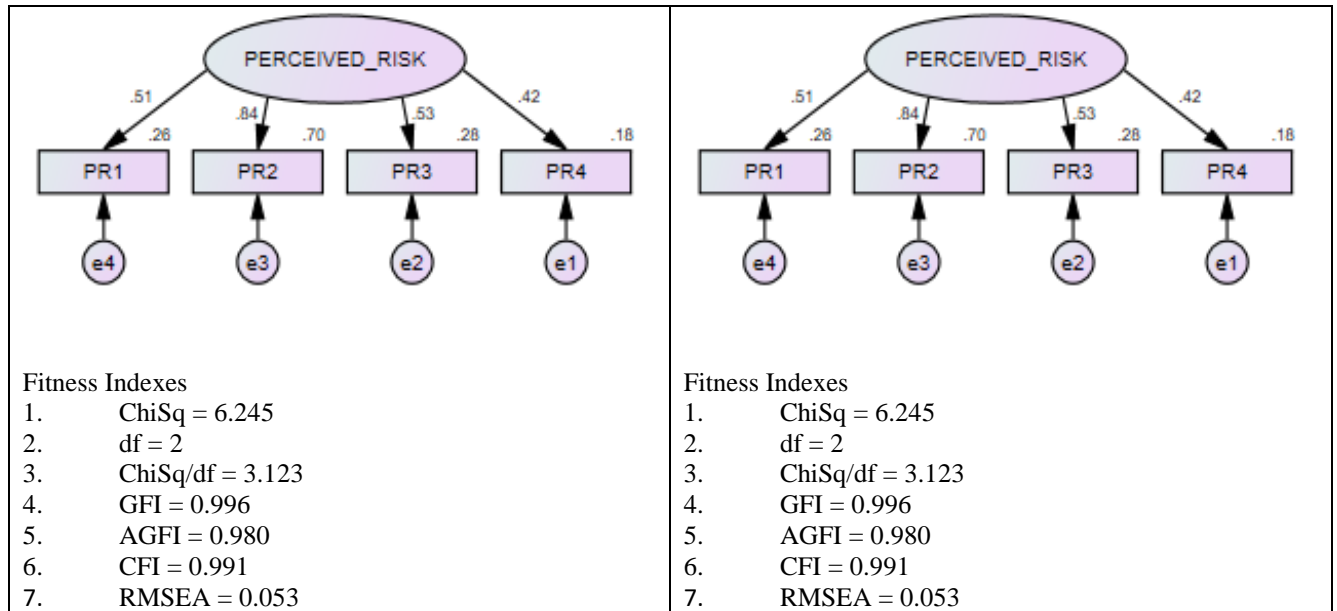
1. Model Fit for Latent Constructs

Further, the measurement model of a latent construct must undergo CFA. Only then they are ready to be modelled in SEM. The model fit for measurement model for each latent construct were tabulated in Table 3.

Table 3. Model Fit for Measurement Model.

Model Before Fit	Model After Fit
EFFORT EXPECTANCY	
 <p>Fitness Indexes</p> <ol style="list-style-type: none"> 1. ChiSq = 64.878 2. df = 5 3. ChiSq/df = 12.976 4. GFI = 0.969 5. AGFI = 0.908 6. CFI = 0.955 7. RMSEA = 0.125 	 <p>Fitness Indexes</p> <ol style="list-style-type: none"> 1. Chi-Square = 11.702 2. df = 3 3. ChiSq/df = 3.900 4. GFI = 0.994 5. AGFI = 0.971 6. CFI = 0.993 7. RMSEA = 0.061
SOCIAL INFLUENCING	





Confirmatory Factor Analysis (CFA)

Table 4 shows the value of factor loadings, Cronbach’s alpha, composite reliability and Average Variance Extracted (AVE). All Composite Reliability values are shown to be larger than 0.6. This indicates that the latent variables show a high degree of internal consistency. This finding indicates that constructs correspond to construct convergent validity.

Table 4. Results of Reliability and Validity Measurement Model.

Constructs	Items	Factor Loading	Cronbach’s alpha	Composite Reliability	AVE
Effort Expectancy (EE)	EE1	0.808	0.771	0.856	0.546
	EE2	0.696			
	EE3	0.632			
	EE4	0.857			
	EE5	0.767			
Social Influence (SI)	SI1	0.380	0.780	0.796	0.460
	SI2	0.870			
	SI3	0.773			
	SI4	0.731			
	SI5	0.514			
Privacy Concerns (PC)	PC1	0.902	0.763	0.907	0.711
	PC2	0.788			
	PC3	0.847			
	PC4	0.834			
Perceived Risk (PR)	PR1	0.573	0.653	0.683	0.358
	PR2	0.763			
	PR3	0.549			
	PR4	0.469			

In addition, the convergent validity test is crucial to determine whether the indicators are loaded together on a single construct while discriminant validity test to verify whether the items developed to measure the different constructs are actually evaluating those constructs (Shannak, Masa'deh & Maqableh, 2013). If all values of AVE are higher than 0.5, the convergent validity is accepted (Gye-Soo, 2016). However, if the AVE showed less than 0.5 with composite reliability higher than 0.6, the convergent validity of the construct is still adequate (Fornell & Larcker, 1981). From Table 4, it can be seen that all values of AVE are higher than 0.4 and convergent validity was confirmed.

The output of calculated discriminant validity index is presented in Table 5. The square root of AVE value in each latent variable with correlation squared used to establish discriminant validity. Discriminant validity is determined by the lower left triangle of the table and is considered to be satisfactory if the diagonal element is larger than the off-diagonal element.

Table 5. Results of Discriminant Validity Index.

Construct	EE	SI	PC	PR
EE	0.74			
SI	0.10	0.68		
PC	0.37	0.09	0.84	
PR	0.33	0.29	0.13	0.60

Generally, the size of the factor loadings and the number of variables depending on the sample size are also important elements for obtain a good CFA or SEM model. According to (Shi, Song & Lewis, 2017), CFI, TLI and RMSEA estimates are functions of the chi-square statistic, whose bias is affected by both sample size and model size. For the result of fitness indexes in Table 6, it can be seen that there are certain fitness indexes do not achieve the required level; RMSEA (> 0.08) and relative chi-square (> 5).

According Sacha (2019), to indicate the fit criteria for RMSEA, the range values of RMSEA were between less than 0.5 and 0.1, where < 0.05 as “very good fit”, range between 0.05 and 0.08 considered as “good fit”, range between 0.08 and 0.1 as “mediocre fit”, and > 0.1 as “unacceptable”. For small sample sizes (< 200), the chi-square/df does not deny an inadequate model whereas, in large sample sizes, an appropriate model may be wrongly rejected (Singh, Junnarkar & Kaur, 2016). Because of the large sample size in this study, we decided to accept the parsimonious fit in CFA is low fit model and the mediocre fit of RMSEA.

Table 6. Fitness Indexes Assessment for the Measurement Model in Figure 3.

Category	Name of Index	Value of Index
Absolute fit	RMSEA	0.086
	GFI	0.907
Incremental fit	CFI	0.864
Parsimonious fit	Chisq/df	6.709

The Figure 2 shows the correlations among four constructs. Effort expectancy has strength positive correlation with social influence, privacy concerns and perceived risk with the values are 0.10, 0.37 and 0.33 respectively. Social influence also has positive correlation with privacy concerns (0.08) and perceived risk (0.29) while privacy concerns has positive correlation with perceived risk (0.13).

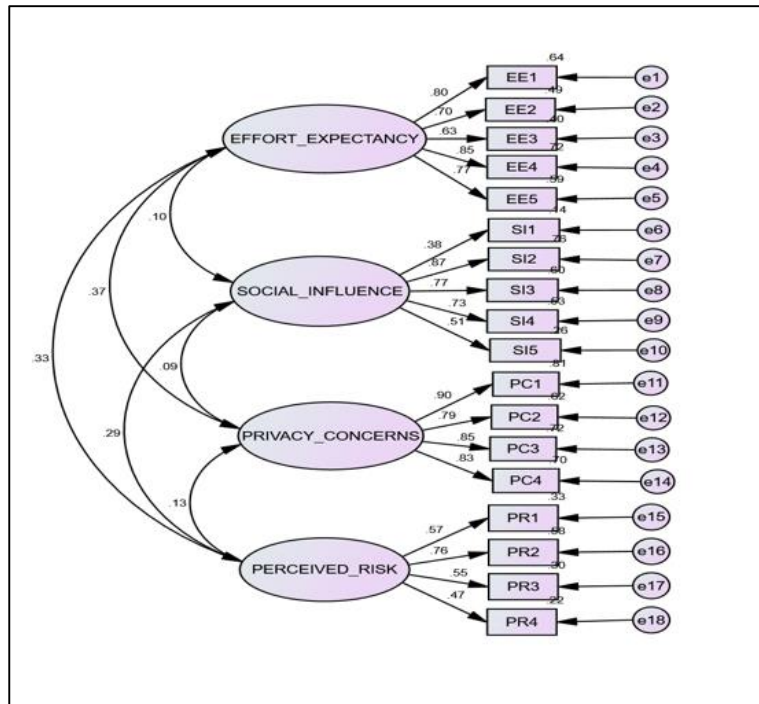


Figure 2. The results of CFA in measurement model.

The Structural Model

Later, the relationships between constructs as hypothesized in the proposed theory will be tested by transforming the measurement model into the structural model (Hair *et. al.*, (2010)). The most important elements of SEM are to determine the fit of a given model. It decides the acceptance or rejection of the model and indices provide the simplest indication of the performance of the proposed theory to fit the data. The Chi-Squared test, RMSEA, GFI, CFI, and AGFI included in this category. Based on Table 7, Goodness-of-Fit for the model was met and provided evidence of a good model fit. As a result, all fitness indexes such as GFI, CFI, IFI and AGFI are above the accepted value which indicates that the model used in this study fits well with the data. The output of Goodness-of-Fit index is presented in Table 7.

Table 7. Goodness of fit Indices for Structural Model.

Category	Name of Index	Accepted Value	Model Value
Absolute fit	RMSEA (Root Mean Square Error of Approximation)	< 0.08	0.055
	GFI (Goodness of Fit Index)	> 0.90	0.921
Incremental fit	CFI (Comparative Fit Index)	> 0.90	0.902
	IFI (Incremental Fit Model)	> 0.90	0.903
Parsimonious fit	Chisq/df	< 5.00	3.302
	AGFI (Adjusted Goodness of Fit Index)	> 0.80	0.893

Figure 3 shows the result of the standardized path coefficients accompanied with its summarization in Table 8. As shown in Figure 3, the standardized beta estimate for effect of privacy concerns on perceived risk is 0.17. The standardized beta estimate for effect of effort expectancy, social influence, privacy concerns and perceived risk are 0.265, 0.202, 0.220 and 0.659 respectively on trust. While on dependent variable (continuance intention), the standardized beta estimate for effect of effort expectancy (0.061), social influence (- 0.002), perceived risk (- 0.325) and trust (1.033).

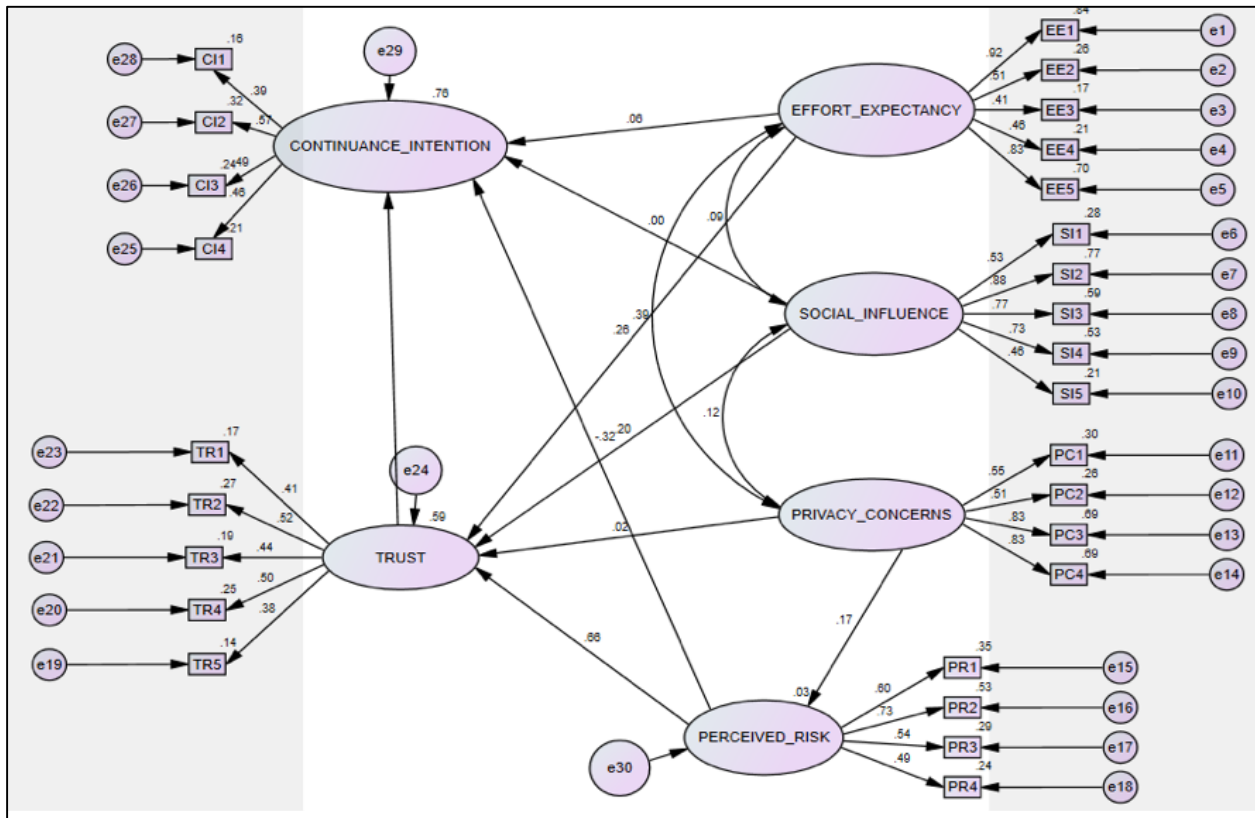


Figure 3. The Structural Equation modeling result (Standardized path coefficients).

Moreover, the measure of correlation between exogenous constructs (effort expectancy, social influence and privacy concerns) are 0.09 (between effort expectancy and social influence), 0.12 (between social influence and privacy concerns) and 0.39 (between effort expectancy and privacy concerns). All the correlation between exogenous constructs is below 0.85 indicates that discriminant validity is achieved and not redundant with each other's (Shau, 2017).

Table 8. The Standardized Regression Weight (Factor Loading).

Construct	Path	Construct	Estimate
Perceived Risk	<---	Privacy Concerns	0.170
Trust	<---	Effort Expectancy	0.265
Trust	<---	Social Influence	0.202
Trust	<---	Privacy Concerns	0.220
Trust	<---	Perceived Risk	0.659
Continuance Intention	<---	Effort Expectancy	0.061
Continuance Intention	<---	Social Influence	- 0.002
Continuance Intention	<---	Perceived Risk	- 0.325
Continuance Intention	<---	Trust	1.033

The result of regression weights for each path in this study were presented in Table 9. It shows the direct effects were significant except (1) between Trust and Privacy Concerns (0.02), (2) between Continuance Intention and Effort Expectancy (0.06), (3) between Continuance Intention and Social Influence (0.00) and (4) between Continuance Intention and Perceived Risk which were insignificant (- 0.32). All the direct effects were significant Perceived Risk to Privacy Concerns (0.17), Effort Expectancy to Trust (0.26), Social Influence to Trust (0.20), Perceived Risk to Trust (0.66) and Trust to Continuance Intention (1.03). The results indicate that the Trust has highly significant effect on Continuance Intention while Perceived Risk is has insignificant on Continuance Intention.

Table 9. The Regression Weights for Every Path and its Significance.

Construct	Path	Construct	Estimate	S.E	C.R	P-value	Result
Perceived Risk	<---	Privacy Concerns	0.158	0.043	3.721	0.001	Significant
Trust	<---	Effort Expectancy	0.109	0.022	4.903	0.001	Significant
Trust	<---	Social Influence	0.150	0.038	3.922	0.001	Significant
Trust	<---	Privacy Concerns	0.016	0.029	0.546	0.585	Not Significant
Trust	<---	Perceived Risk	0.497	0.071	7.018	0.001	Significant
Continuance Intention	<---	Effort Expectancy	0.030	0.038	0.790	0.429	Not Significant
Continuance Intention	<---	Social Influence	- 0.002	0.060	- 0.035	0.972	Not Significant
Continuance Intention	<---	Perceived Risk	- 0.290	0.145	-1.992	0.046	Not Significant
Continuance Intention	<---	Trust	1.221	0.290	4.209	0.001	Significant

The value of path coefficient of Effort Expectancy to Trust is 0.109 which indicates that 0.109 unit scale increase in Trust would contribute to each one unit scale increase in Effort Expectancy. The effect of Effort Expectancy on Trust is significant (p -value < 0.05), thus, for H1, there is a significantly positive relationship between Effort Expectancy and Trust for using Facebook. The results of every hypothesis in this study is presented in Table 10.

Table 10. Results of Hypothesis Testing for the Respected Path.

Hypothesis	Estimate	P-value	Result on Hypothesis
<i>H1</i> : There is a relationship between effort expectancy and trust for using Facebook.	0.109	0.001	Supported
<i>H2</i> : There is a relationship between effort expectancy and continuance intention for using Facebook	0.030	0.429	Not Supported
<i>H3</i> : There is a relationship between social influence and trust for using Facebook.	0.150	0.001	Supported
<i>H4</i> : There is a relationship between social influence and continuance intention for using Facebook.	- 0.002	0.972	Not Supported
<i>H5</i> : There is a relationship between privacy concerns and trust for using Facebook.	0.016	0.585	Not Supported
<i>H6</i> : There is a relationship between privacy concerns and perceived risk for using Facebook.	0.158	0.001	Supported
<i>H7</i> : There is a relationship between perceived risk and trust for using Facebook.	0.497	0.001	Supported
<i>H8</i> : There is a relationship between perceived risk and continuance intention for using Facebook.	- 0.290	0.046	Not Supported
<i>H9</i> : There is a relationship between trust and continuance intention for using Facebook.	1.221	0.001	Supported

CONCLUSION

The use of the internet can connect every population around the world, where Social Networking Services (SNS) is a platform for everyone to communicate. SNS is also a powerful platform as it allows users to share interests, backgrounds or real relationships in their lives. Its ability to allow a shared personal information, profiles and more personalize information makes it a conducive platform for data accumulation and may be susceptible to certain threats and risks. Therefore, this study specifically examined user's trust in Facebook, in particular on the privacy concerns and perceived risk, combined with effort expectancy, social influence of user trust and continuance intention. The findings revealed the mediating effect of perceived risk and trust using all the factor effort expectancy, social influence and privacy concerns has a good model fit on the continuance Intention.

This study revealed that the Effect Expectancy (EE) has significantly influence the user's Trust (TR) when using the Facebook in their daily life. It was supported by previous study by Shau (2017) that found the user's trust influenced by EE. Besides, the results of effort expectancy do not significantly influence user's continuance intention in using Facebook. Prior study by Aboelimged and Gebba (2013) mentioned that user's continuance intention not influenced by effort expectancy. This finding suggested that users will use SNS if the trust built in Facebook can provide social interaction, effective browsing and enjoyable experience, where it will indirectly increase user's continuance intention to using SNS. The easiness to use on Facebook is an important factor to develop user's trust. Most previous studies have proven that it requires trust first before the user intends to continue using SNS on Facebook.

Further, the findings indicated that social influence in using SNS of Facebook significantly influenced user's trust but is not significant with continuance intention to use the SNS Facebook. These findings suggest that users' trust was influenced by the social factors such as family members, friends or colleagues. If users get a good viewpoint, it is able to create trust in using SNS of

Facebook. However, if negative responses are received, it will cause the use of SNS of Facebook to be non-sustainable. Thus, the results of this study are consistent with previous studies Aboelmaged and Gebba (2013) that found the user's trust was influenced by social influence while not influenced by continuance intention. Also, previous study shows that Facebook is identified as easier to navigate and very user-friendly.

Next, this study shows that the privacy concern does not influenced by the users' trust but do influenced by perceived risks. A previous study by Shaikh and Karjaluoto (2015) found the factor of privacy concerns not influenced by users' trust. Most of users will think that if their information is shared on Facebook, it will cause the information to be used by strangers and can be used in the wrong way by others. As a result, SNS of Facebook users' privacy concern causes more harm to users' trust where the user's think Facebook is an unreliable channel. For privacy concerns do influenced by perceived risk, it was support by study from Chang, Liu and Shen (2017). Besides, users will think about the risks that they need to be taken with caution with adverse effects in committing reactions or behaviours while sharing information on SNS of Facebook. The users maybe are worried about their accounts may be hacked. In addition, security by SNS of Facebook can create fraud where it refers to activities of financial loss or loss of confidence in the systems. Therefore, if the user focuses on privacy concerns, the user will also focus on perceived risk.

In addition, other findings indicate that the perceived risk was influenced by users' trust, but interestingly it does not influence the continuance intention in using SNS of Facebook. It is consistent with the previous study by Shaikh and Karjaluoto (2015) that found the perceived risk was influenced by users' trust while it does not influence by continuance intention. These findings suggest that the platform built on networking to search for new friend or information is based on large number of weak ties that are partially overlapping the circles, thus the risks are easily weaken. Therefore, once there is available threat such as privacy risks and loss of trust are presence, users are likely to end their use of Facebook. Referring to this study, users who have a good experience in SNS of Facebook will be likely to believe that this channel can meet their expectations and users' trust Facebook will keep the privacy promise to them. But if users have been involved in problems while using Facebook, they will choose to reduce the risk by stopping the use of Facebook altogether.

The final finding showed that the user's trust was influenced by continuance intention where it was support by previous study by Shaikh and Karjaluoto (2015). Trust in technology implies that users' acceptance to rely on the system because they expect it to have attributes to take care of their privacy concerns, perceived risks, effort expectancy, social influence on continuance intention in using SNS of Facebook. If the users have trust, it will indirectly make the user want to use the Facebook continuously (Sharif *et. al.* (2021)). Thus, this study proves that, users' needs to have trust before thinking to continue using this channel. Where, this belief exists if the four factors are given priority such as privacy concerns, perceived risk, effort expectancy and social influence.

LIMITATION AND SUGGESTION FOR FUTURE RESEARCH

This study only involved students from private and public universities and the respondents were selected based on convenience sampling, hence the generalization of the findings cannot be done to represent all students in Malaysia.

In the future, more data from various age of Facebook users should be involved. From that, we can validate our findings in larger groups of respondents. Other than that, another media such as Instagram, Twitter to name a few should also be put under consideration for new research.

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REFERENCES

- Aboelmaged, M. G, & Gebba, T. R. (2013), Mobile Banking Adoption: An Examination of Technology Acceptance Model and Theory of Planned Behavior, *International Journal of Business Research and Development*, 2(1), 35-50.
- Afthanorhan, A (2014). Re: Which goodness-of-fit indices or statistical test should be used in interpreting the results of a CFA, using the WLS method? Retrieved from: https://www.researchgate.net/post/Which_goodness-of-fit_indices_or_statistical_test_should_be_used_in_interpreting_the_results_of_a_CFA_using_the_WLS_method/53fe919cd4c118135f8b4629/citation/download.
- Awang, Z. (2012). Structural equation modeling using AMOS graphic. Penerbit Universiti Teknologi MARA.
- Bagozzi, Richard & Yi, Youjiae (1988). On the Evaluation of Structure Equation Models. *Journal of the Academy of Marketing Science*. 16. 74-94.
- Bentler, P. (1989). EQS structural equations program manual. Los Angeles, CA: BMDP Statistical Software.
- Bentler, P, & Bonett, D. (1980). Significance Tests and Goodness-of-Fit in Analysis of Covariance Structures. *Psychological Bulletin*. 88. 588-606. 10.1037/0033-2909.88.3.588.
- Browne, M. W., Cudeck, R. (1993). Alternative ways of assessing model fit. In Bollen, K. A., Long, J. S. (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.
- Chang, S. E., Liu, A. Y., & Shen, W. C. (2017). User trust in social networking services: A comparison of Facebook and LinkedIn. *Computers in Human Behavior*, 69, 207-217.
- Constine, J. (2010). Facebook has users identify friends in photos to verify accounts, prevent unauthorized access. Retrieved from <http://www.insidefacebook.com/2010/07/26/facebook-photos-verify/>
- Constine, J. (2012). Facebook asks every user for a verified phone number to prevent security disaster. Retrieved from <http://techcrunch.com/2012/06/14/facebook-security-tips/>
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.*, 18, 39–50.
- Gye-Soo, K. (2016). Partial Least Squares Structural Equation Modeling (PLS-SEM): An application in Customer Satisfaction Research. *International Journal of U- and E- Service, Science and Technology*, 9(4), 61-68.
- Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis*, 7th Ed., Prentice-Hall, Upper Saddle River, NJ.
- Jang, Y. T., Chang, S. E., & Chen, P. A. (2015). Exploring social networking sites for facilitating multichannel retailing. *Multimedia Tools and Applications*, 74(1), 159-178.

- Joreskog, K. G., & Sorbom, D. (1993). LISREL 8: Structural equation modeling with the SIMPLIS command language. Chicago, IL: Scientific Software International. reliability. *Journal of Applied Psychology*, 98(1), 194–198.
- Kellogg, K. (2020). The 7 Biggest Social Media Sites in 2020. Retrieved from <https://www.searchenginejournal.com/social-media/biggest-social-media-sites/#close>
- Medaglia, R., Rose, J., Nyvang, T., & Sabo, O. (2009). Characteristics of Social Networking Services. In *4th Mediterranean Conference on Information Systems*. Athens University of Economics and Business.
- Muhamad Safiih, L. & Nor Azreen, M. A. (2016). *Confirmatory Factor Analysis Approach: A Case Study of Mathematics Students' Achievement in TIMSS*. Malaysian Journal of Mathematical Sciences 10(S) Special Issue: The 10th IMT-GT International Conference on Mathematics, Statistics and its Applications 2014 (ICMSA 2014). March: 41- 51.
- Peterson R, A. & Kim, Y. (2013). On the relationship between coefficient alpha and composite reliability. *Journal of Appl Psychol*. 98(1):194-8. doi: 10.1037/a0030767.
- Reinard, J. C. (2006). *Communication research statistics*. SAGE Publications, Inc.
- Sacha, E. (2019). Confirmatory Factor Analysis, Fitting CFA models. Retrieved August 22, 2020, from http://sachaepskamp.com/files/SEM12019/SEM1Week2_2019.pdf
- Shaikh, A. A., & Karjaluoto, H. (2015). *Mobile banking adoption: A literature review*. *Telematics and Informatics*, 32(1), 129–142. doi:10.1016/j.tele.2014.05.003
- Shannak, R., Masa'deh, R., & Maqableh, M. (2013). A structural equation modeling approach for determining antecedents and outcomes of students' attitude toward mobile commerce adoption. *Life Science Journal*, 10(4), 2321-2333.
- Shau, T. V. (2017). The Confirmatory Factor Analysis (CFA) of Preschool Management Model in Sarawak. *International Journal of Academic Research in Business and Social Sciences*, 7(6). doi:10.6007/ijarbss/v7-i6/2959
- Sharif, Ashraf, Saira H. Soroya, Shakil Ahmad, and Khalid Mahmood (2021). Antecedents of Self-Disclosure on Social Networking Sites (SNSs): A Study of Facebook Users, *Sustainability* 13(3), <https://doi.org/10.3390/su13031220>
- Shi, D., Song, H., Lewis, M. D. (2017). The impact of partial factorial invariance on cross-group comparisons. Assessment. *Advance online publication*.
- Singh, K., Junnarkar, M., & Kaur, J. (2016). Measures of Positive Psychology, Development and Validation. Berlin: Springer
- StatisticSolutions, (2019), Structural Equation Modeling, Retrieved on 27 May 2020, from <https://www.statisticssolutions.com/structural-equation-modeling/>
- Tan, X., Qin, L., Kim, Y., & Hsu, J. (2012). Impact of privacy concern in social networking web sites. *Internet Research*, 22(2), 211-233.
- Yokoyama, M. H. & Sekiguchi, T. (2014). The Use of Social Network Sites in the Workplace: a Case Study in Brazilian Companies. *Brazilian Business Review*, 11(2), 87-114.