The impact of attitude, subjective norms, perceived behavioral control, and perceived risks on intention in online shopping in Jordan

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CHRONICLE	ABSTRACT
	Previously, studies reported inconclusive findings while analyzing the influence of factors affecting online purchase intention. Also, most studies were conducted in the context of developed countries, limiting us to a specific context. Hence, for comprehensive understanding, this study aims at examining the factors affecting the online purchase intention in the e-commerce industry of Jordan. The survey was conducted to collect data from university students in Jordan. Structural equation modeling was employed to analyze the data. Findings show that attitude, subjective norms, perceived behavioral control are positively associated with online purchase intention. However, perceived risks are negatively associated with online purchase intention. Although all factors are significantly related to online purchase intention, the attitude has a greater influence. This study adds value to the theory of planned behavior and consumer behavior by examining attitude, subjective norm, perceived behavioral control, and perceived risks as important predictors of online purchase intention. Besides, this study suggests that online retailers must keep their commitments, promises, and customers' interests in mind while developing e-commerce strategies.

1. Introduction

Online shopping has played an important part in the last two decades and more than 1.6 billion people are currently doing online shopping worldwide (Al-Adwan & Yaseen, 2019; Rehman, Bhatti, Mohamed, & Ayoup, 2019). Also, the global revenue coming from e-commerce amounted to 3.53 trillion US dollars in 2019, which is now projected to increase by 6.54 trillion US dollars in 2022 (Sabanoglu, 2020). These continuous trends in online shopping present massive market potential. It may be credited to the fact that online shopping allows consumers to easily locate, compare, and buy the products (Al-Adwan et al., 2022; Arora & Aggarwal, 2018). However, only 18% of the world's shopping is currently occurring over the e-commerce platform, while the rest 82% follow traditional shopping. Moreover, despite the popularity of online shopping worldwide, the rate of online shopping in developing countries is lower than in developed countries (Al-Adwan & Al-Horani, 2019; Poushter, Bishop, & Chwe, 2018). Particularly, the e-commerce industry in Jordan is facing several challenges associated with online shopping (Al-Husban, Al-Husban, & Yaseen, 2018). Although the penetration of the internet in Jordan is quite impressive (88%), the Jordanian Department of Statistics (2017) reported that online shopping is as low as 4.8% (Alsoud & bin Lebai Othman, 2018). Similarly, Al-Matarneh (2016) reported that the growth rate of online shopping in Jordan decreased from 14% in 2011-2012 to 8% in 2015-2016. Moreover, according to Digital report 2024, the percentage of online shopping in Jordan is 14.3. Consequently, it is essential to examine the drivers affecting consumer online shopping in the developing context of Jordan. Previously, several factors have been identified to examine their influence on consumer's intention to purchase online. For instance, Lim, Osman, Salahuddin, Romle, and Abdullah (2016) reported that subjective norms

is an important determinant of online shopping intent; however, these factors are not directly related to actual online shopping. The theory of planned behavior (TPB), Yean, Johari, and Sukery (2015) reported that subjective norms and attitude positively influence online purchase intention; however, they could not find the positive impact of perceived behavioral control on online purchase intention as expected. Besides, Kashif, Zarkada, and Ramayah (2018) identified that all three predictors i.e. subjective norms, attitude and perceived behavioral control were positively associated with online purchase intention. Similarly, Singh and Srivastava (2018) considered attitude and subjective norms as a significant determinant of intention. It can be assumed, previous studies provide inconsistent and inconclusive results, asking for a comprehensive understanding of the influence of factors on online purchase intention in the context of developing countries. Hence, the current study aims at examining the factor affecting online purchase intention in the context of Jordan. For that purpose, this study extended the theory of planned behavior (Ajzen, 1991) by examining the attitude, subjective norms, perceived behavioral control, and perceived risks concerning the intention to shop online. Consequently, theoretical contributions of the current study are two-fold (1) this study adds value to the literature on consumer behavior and e-commerce by examining TPB and perceived risks with online purchase intention (2) this study examines the perceived risks as an important predictor of online purchase intention along with factors identified in TPB to provide a comprehensive understanding about the factors influencing online purchase intention. It would be an important contribution to the existing literature on consumer behavior in an e-commerce context as TPB is limited to only three predictors, ignoring other essential factors such as risk factors.

2. Literature Review and Hypotheses Development

2.1 Theory of planned behavior (TPB)

Given the drawbacks of the theory of reasoned actions (TRA) in dealing with the voluntary behavior of consumers, Ajzen (1991) extended TRA to TPB by proposing that consumers may have control over certain behaviors, hence, voluntary action can be expected. Concerning TRA, TPB provides a better explanation than a person is supposed to perform a certain behavior only if he/she got control over his/her behavior (Ajzen, 1991). Bothe TPB and TRA are extensively used in predicting consumer behavior. In a meta-analysis, Han and Stoel (2017) recommended TPB is better at predicting consumer behavior as compared to TRA. Therefore, this study has extracted predictors from the TPB in examining their influence on online purchase intention.

2.2 Attitude and Online Purchase Intention

The attitude of an individual plays a vital role in shaping the intention to execute a particular behavior. Attitude depends on the individual's experience which reflects his/her opinion of outcomes concerning a particular behavior. Ajzen (1991) refers to attitude as an overall judgment of behavior from an individual's perspective. Besides, attitude is shaped by certain beliefs that an individual holds regarding outcomes of a particular action in terms of favorable or unfavorable. Attitudes are formed within a specific period and hard to change but maybe influenced due to fulfillment of psychological motivations (Peña-García, Gil-Saura, Rodríguez-Orejuela, & Siqueira-Junior, 2020) In particular, the attitude of an individual can be changed once he/she learns new concepts or ideas (Shaouf, Lü, & Li, 2016). TRA posits that intentions are the product of attitude toward a particular behavior. Hence, the greater the positive attitude, the more will be the intention to execute a particular behavior (Amaro & Duarte, 2015; Kashif et al., 2018; Peña-García et al., 2020). We assume that consumers' intention to purchase will be greater if their assessment of online buying is positive. Hence, we propose the following hypothesis.

H1: *Attitude is significantly associated with the online purchase intention.*

2.3 Subjective Norms and Online Purchase Intention

There are multiple external factors such as the perceived pressure of family, relatives, and friends which influence or shape the individual behavior to make a purchase decision (Ajzen, 1991). Likewise, subjective norms are essential elements of TPB which refer to an individual perception influenced by his/her social surroundings, leading to approach or avoidance behavior (Ajzen, 1991). Subjective norms can refer to the motivations which consumers receive from his/her social circle to make an online purchase. It has been observed that people are inclined to subjective norms while making decisions because they are much attached to their role models (Purani, Kumar, & Sahadev, 2019). Besides, there is recent empirical evidence that determined that subjective norms are positively associated with online purchase intention (Al-Adwan, 2019; Hasbullah et al., 2016; Purani et al., 2019; Rehman et al., 2019). So, we propose the following hypothesis.

H2: *Subjective norm is significantly associated with the online purchase intention.*

2.4 Perceived Behavioral Control (PBC) and Online Purchase Intention

Ajzen (1991) introduced the notion of an individual's self-belief that shapes his/her intentions. Afterward, this concept is termed as perceived behavioral control (PBC), referring to an individual's personal beliefs about his/her capabilities to exhibit certain behaviors (Barlett, 2019; Davis et al., 1989). Hence, an individual who has lesser control over a particular situation is less likely to participate in it. In the context of e-commerce, PBC refers to the level of control that consumers think they have

over the external factor while making an online purchase (Amaro & Duarte, 2015). However, due to uncertain situations caused by the online environment, consumers may lose control over the situation (Bach, Souza, & da Veiga, 2020)'. Therefore, people prefer to participate in those situations that can be controlled (Wang, Yeh, & Liao, 2013). Perceived behavioral control is an important factor in helping the individual to search for appropriate information and to make decisions (Esfandiar, Pratt & Altinay, 2019). Previous studies found that perceived behavioral control had a positive influence on online purchase intention (Kashif et al., 2018; Mainardes, Souza, & Correia, 2020). Hence, we make the following hypothesis.

H₃: *Perceived behavioral control is significantly associated with the online purchase intention.*

2.5 Perceived Risks and Online Purchase Intention

According to Han and Kim (2017), perceived risk refers to the expectation about the losses. The more the expectations, the greater the degree of risk that will be perceived by the consumers (Al-Adwan et al., 2020; Bebber et al., 2017). Also, Kamalul Ariffin, Mohan, and Goh (2018) referred to perceived risks as negative insights resulting from the uncertain outcomes associated with the products to be purchased. Perceived risks play a significant role in influencing purchase intentions as they are crucial for customers' evaluation and purchase decisions (Han & Kim, 2017). Consumers associate a higher degree of risk with online shopping as compared to physical stores. Hence, consumers who perceive a high level of risk are less likely to buy online (Zhao, Deng, & Zhou, 2017). Similarly, Pappas (2016) determined that perceived risks are negatively associated with consumer online purchase intention. Perceived risks can be reflected in the form of financial risk (Bebber et al., 2017), time risk (Kamalul Ariffin et al., 2018), and performance risk (Han & Kim, 2017) when it comes to online buying and has a negative influence on the online purchase intention. So, we propose the

H₄: *Perceived risks are negatively related to online purchase intention.*

3. Methodology

3.1 Population and sampling

The current study employed a survey method to gather data as appropriate and recommended by previous studies to test study hypotheses. The questionnaire contains 42 items, including questions on demographic and main study constructs, which is followed by a 1-10 Likert scale. The data was collected through cluster random sampling from university students in Jordan. Before distributing the questionnaires, translation in Arabic was done for better understanding of the respondents. In this regard, two university professors translated the original questionnaire into Arabic, which was further back translated to English by linguist experts to ensure validity.

3.2 Data Analysis

This section provides information about the descriptive statistics, confirmatory factor analysis to assess convergent and discriminant validity, and structural model to test study hypotheses.

3.3 Descriptive Statistics of Study Constructs

The mean values of constructs range between 4.36 and 5.51 (Table 1). It reveals that the majority of the respondents have positively perceived items on all constructs as the mean value is greater than or near to the neutral point of 5. It presents the agreeableness of the respondents toward different items on each study constructs. Although respondents have a greater propensity towards all construct, the majority has a positive perception of the attitude towards online shopping (mean= 5.51).

Table 1
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
AT	405	1.00	10	5.5107	2.30285
Sub_norm	405	1.00	10	4.7298	2.71852
PB_C	405	1.00	10	5.1827	2.31462
Per_Risk	405	1.00	10	4.3601	2.28818
Intent	405	1.00	10	5.4598	2.40035

3.4 Structural Equation Modelling (SEM)

This study employed two-stage modeling which includes measurement and structural models. This approach has been widely employed in e-commerce research (Al-Adwan and Kokash, 2019; Al-Adwan et al., 2019). The measurement model investigates the relationships among the indicators (observations) and latent constructs.

3.2.1 Confirmatory Factor Analysis

Before developing a structural model, confirmatory factor analysis (CFA) is done to evaluate unidimensionality, construct, convergent and discriminant validity. In this regard, a pooled CFA model was developed which involves including all variables of the study in a single measurement model. It is more efficient and accurate. Pooled CFA allows researchers to examine the correlation among the latent variables and also helps them to develop a discriminant validity matrix to assess discriminant validity (Awang, Hui, & Zainudin, 2018; Aziz, Afthanorhan, & Awang, 2016). It is suggested that correlation among pairs of constructs should be less than 0.85 to avoid the issue of multicollinearity (Awang et al., 2018; Aziz et al., 2016) (Kashif, Braganca, Awang, & Cyril De Run, 2017; Podsakoff et al., 2003). The problem of multicollinearity occurs if the value of correlation is above 0.85. However, there is no issue of multicollinearity as the value of correlation among pairs of latent variables is less than 0.85 (Table 1).
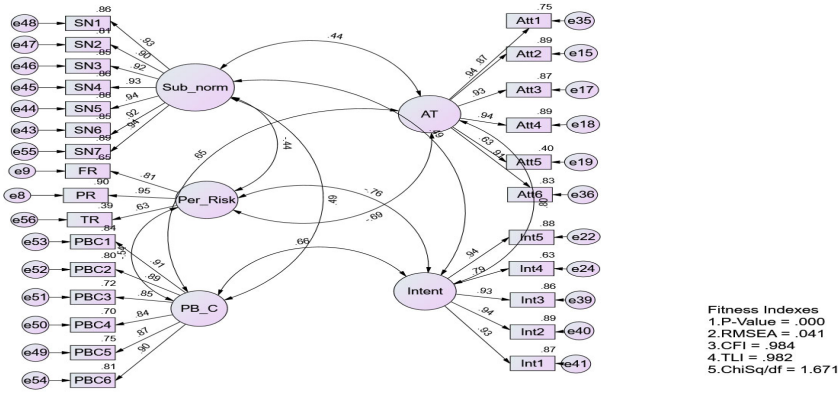

Fig. 1. Measurement Model

This study examined three types of validity; namely construct, convergent, and discriminant validity. The construct validity is ensured when all categories of fitness indices fall within the recommended range. Fig. 1 shows that the value of RMSEA is less than 0.08 (0.041), comparative fit index (CFI) is greater than 0.9 (0.984), and the value of $\chi2/df$ is less than 3 (1.67). Hence, construct validity of perceived risks is satisfied as all fit indices are within the recommended range (Zainudin Awang, Afthanorhan, Mohamad, & Asri, 2015; Hair, Gabriel, & Patel, 2014). Convergent validity is upheld when items show an agreement while measuring the same construct. Three statistical values are important to check the convergent validity: standardized factor loadings, composite reliability (CR), and average variance extracted (AVE). Bagozzi and Yi (1988) suggested that the construction will be considered valid if the value of standardized factor loading is greater than 0.5, the value of CR is greater than 0.7, and if the value of AVE is greater than 0.5. Table 2 shows that convergent validity is satisfied as factor loadings are greater than 0.5, the value of CR is greater than 0.7, and the value of AVE is greater than 0.5. The final part of CFA is the examination of the discriminant validity of the constructs. Fornell and Larcker (1981) indicated that discriminant validity can be checked by comparing the square root value of AVE with the correlation among variables. In this regard, Zaiţ and Bertea (2011) recommended the standards for testing the discriminant validity. According to them, the discriminant validity will be satisfied if the value of the square root of AVE is greater than the correlation among variables. Table number 3 shows that the value of square root of AVE on the diagonal is greater than correlation among each pair of latent constructs except. Hence, the discriminant validity of perceived risks is also satisfied.

Table 2
Average Variance Extracted and Composite Reliability of Pooled CFA

Construct	Factor loadings range	CR	AVE
AT	0.631-0.944	0.952	0.770
Sub_norm	0.898-0.939	0.977	0.856
PB_C	0.839-0.915	0.952	0.770
Per_Risk	0.625-0.950	0.844	0.649
Intent	0.795-0.943	0.960	0.827

Table 3
Results of Discriminant Validity

	CR	AVE	Intent	AT	Sub_norm	PB_C	Per_Risk
Intent	0.960	0.827	**0.909**				
AT	0.952	0.770	0.798	**0.878**			
Sub_norm	0.977	0.856	0.495	0.440	**0.925**		
PB_C	0.952	0.770	0.656	0.646	0.487	**0.877**	
Per_Risk	0.844	0.649	-0.762	-0.686	-0.441	-0.542	**0.805**

3.2.2 Structural Model

After conducting the CFA to assess the validity of all constructs, the structural model is developed to examine the hypothesized relationships. Given the proposed model, the structural model can be developed by creating the relationship among the exogenous, endogenous, and mediator variables with the help of AMOS software (Zainudin Awang et al., 2015; Yusof, Awang, Jusoff, & Ibrahim, 2017). Fig. 2 shows that single-headed arrows linked the exogenous, endogenous, and mediator variables as per the proposed relationship or direction of the relationship. The single-headed arrows show the causal effects of independent variables on dependent variables. The following structural model (Fig. 2) presents standardized estimates, which cover correlation among exogenous variables, factor loadings, the value of R^2 for each construct, and standardized beta coefficients. The standardized beta coefficients link each independent variable with the dependent variable. The standardized regression weights were assessed to examine the hypothesized paths. These beta values indicate the level of effect of independent variables on dependent variables. The information about coefficients given in Fig. 2 is summarized in Table 5.
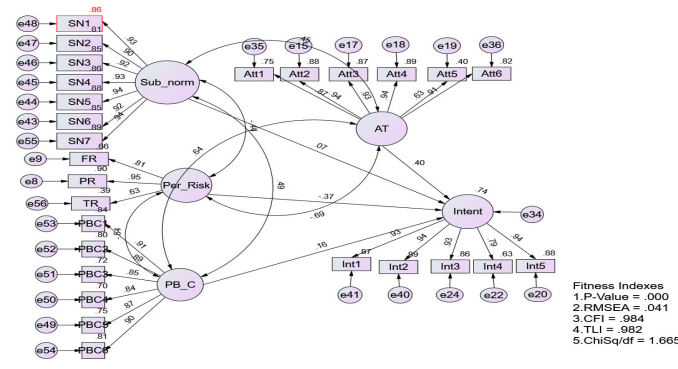

Fig. 2. Structural Model

Table 5 provides information about the coefficient of multiple estimates or R^2. It shows that the inclusion of independent variables in the model brings more than a 50% change in the dependent variable.

Table 4
Coefficient of Multiple Determinations or R-Square

Endogenous variable	R^2	Conclusion
Intention	0.741	Attitude, subjective norms, perceived behavioral control, and perceived risks manage to bring a 74% change in the online purchase intention.

3.2.3 Hypotheses Testing

The results related to hypothesis testing are given in Table 5. H1 posits that Attitude is significantly associated with online purchase intention and it is accepted as the β-value from attitude to online purchase intention is significant with p<0.05. H2 posits that the subjective norm is significantly associated with the online purchase intention and it is accepted as the β-value from the subjective norm to online purchase intention is significant with p<0.05. H3 posits that perceived behavioral control is significantly associated with the online purchase intention and it is accepted as the β-value from perceived behavioral control to online purchase intention is significant with p<0.05. H4 posits that perceived risks are negatively related to online purchase intention, and it is accepted as β-value from perceived risks to online purchase intention is significant with p<0.05. Additionally, Table 5 identifies that attitude has a greater impact on the online purchase intention as compared to perceived risks, perceived behavioral control, and subjective norm.

Table 5
Standardized Regression Paths with Significance Values

	Hypothesized Paths		Estimate	P-value
Intent	←	AT	.402	0.000
Intent	←	Per_Risk	-.367	0.000
Intent	←	Sub_norm	.071	0.036
Intent	←	PB_C	.164	0.000

4. Discussion and Conclusion

Although the penetration of the internet in developing countries is improving, these economies are still facing challenges related to online shopping. Besides, previous studies reported inconclusive results related to factors affecting online purchase intention. Consequently, this study aims at examining the drivers impacting online purchase intention in the Jordanian context. First, the findings show that attitude is positively related to online purchase intention. Hasbullah et al. (2016) also reveal that attitude along with subjective norms are important predictors of online purchase intention in the Malaysian context. Therefore,

it is recommended for online retailers to present a positive attitude to enhance the level of online purchase intention of Jordanian customers. Similarly, Peña-García et al. (2020) reported that attitude, subjective norms, and perceived behavioral control of Columbian consumers are less positively related to online purchase intention as compared to Spain. These findings support our revelation about the effect of attitude on online purchase intention in developing countries. Second, this study reveals that subjective norms are positively associated with online purchase intention, supporting the findings of previous studies (Hasbullah et al., 2016; Purani et al., 2019; Rehman et al., 2019). This finding suggests that online retailers must keep their commitments, promises, and customers' interests in mind as it significantly influences their online purchase intention. Third, the current study shows that perceived behavior control has a positive influence on online purchase intention. Similarly, a previous study determined that perceived behavioral control, attitude, and subjective norms are significant predictors of online purchase intention. Finally, this study shows that perceived risks are negatively related to online purchase intention. It is in line with the findings of Ariffin, Mohan, and Goh (2018) who identified that people may face financial risks and time risks while doing online shopping. Consumers may think it is time-consuming to search for the product over the internet if no proper search engines are available and to wait for the product to be delivered. Also, Kamalul Ariffin et al. (2018) show that consumers can overspend over online websites while looking into discounts, hence, avoiding online buying.

5. Contributions

Previously, we have observed that studies reported inconclusive findings while analyzing the influence of factors affecting online purchase intention. Also, most studies were investigated in the context of developed countries, limiting us to a specific context. Therefore, based on TPB, this examines the influence of attitude, subjective norm, and perceived behavior on online purchasing intention in the Jordanian context. Second, TPB only focuses on three predictors of intention which may lead to theoretical inconsistencies as it does not focus on other important factors such as perceived risk. Hence, to provide a comprehensive understanding of the influence of factors on online purchase intention, this study examines the perceived risks along with subjective norm, attitude, and perceived behavioral control in relation to online purchase intention.

Besides, this study adds value to the practice as well. Online retailers must work on developing a favorable attitude toward providing online services to enhance online purchase intention. As we have found that attitude is more influential in influencing online purchase intention. Moreover, this study determines that perceived risks are negatively related to online purchase intention. Hence, online retailers can enhance online purchase intention by reducing time risks, financial risks, and performance risks. There are certain limitations in the present study. This study used a survey method to collect data. Therefore, future study is required to conduct experimental and qualitative research to get deeper insights into the factors. Second, future studies are required to examine the model of current study among different e-commerce categories like e-banking, clothing, electronic, and fashion. Finally, future studies may include situational and personal variables as moderators while examining the factors affecting online purchase intention.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes, 50*(2), 179-211.

Al-Adwan, A. S., & Al-Horani, M. A. (2019). Boosting customer e-loyalty: An extended scale of online service quality. *Information*, *10*(12), 380.

Al-Adwan, A. S., Al-Debei, M. M., & Dwivedi, Y. K. (2022). E-commerce in high uncertainty avoidance cultures: The driving forces of repurchase and word-of-mouth intentions. *Technology in Society*, *71*, 102083.

Al-Adwan, A. S., Alrousan, M. K., Yaseen, H., Alkufahy, A. M., & Alsoud, M. (2022). Boosting online purchase intention in high-uncertainty-avoidance societies: a signaling theory approach. *Journal of Open Innovation: Technology, Market, and Complexity, 8*(3), 136.

Al-Adwan, A. S., & Yaseen, H. (2023). Solving the product uncertainty hurdle in social commerce: The mediating role of seller uncertainty. *International Journal of Information Management Data Insights*, *3*(1), 100169.

Al-Adwan, A. S., & Kokash, H. (2019). The driving forces of Facebook social commerce. *Journal of theoretical and applied electronic commerce research*, *14*(2), 15-32.

Al-Adwan, A. S., Alrousan, M., Al-Soud, A., & Al-Yaseen, H. (2019). Revealing the black box of shifting from electronic commerce to mobile commerce: The case of Jordan. *Journal of theoretical and applied electronic commerce research*, *14*(1), 51-67.

Al-Adwan, A. S. (2019). Revealing the influential factors driving social commerce adoption. *Interdisciplinary Journal of Information, Knowledge, and Management*, *14*, 295-324.

Al-Adwan, A. S., Kokash, H., Adwan, A. A., Alhorani, A., & Yaseen, H. (2020). Building customer loyalty in online shopping: the role of online trust, online satisfaction and electronic word of mouth. *International Journal of Electronic Marketing and Retailing*, *11*(3), 278-306.

Al-Husban, M., Al-Husban, A., & Yaseen, H. (2018). Facilitating e-commerce in Jordan: A qualitative analysis. *International Journal for Digital Society (IJDS), 7*(4), 1206-1213.

Al-Matarneh, N. S. (2016). Online Shopping Risks and Effect on Consumers Purchasing Behavior. *International Journal of Online Marketing Research, 2*(1), 62-69.

Alsoud, M. A. S., & bin Lebai Othman, I. (2018). The Determinant of Online Shopping Intention in Jordan: A Review and Suggestions for Future Research. *International Journal of Academic Research in Business and Social Sciences, 8*(8).

Amaro, S., & Duarte, P. (2015). An integrative model of consumers' intentions to purchase travel online. *Tourism management, 46*, 64-79.

Ariffin, S. K., Mohan, T., & Goh, Y.-N. (2018). Influence of consumers' perceived risk on consumers' online purchase intention. *Journal of Research in Interactive Marketing*.

Arora, N., & Aggarwal, A. (2018). The role of perceived benefits in formation of online shopping attitude among women shoppers in India. *South Asian Journal of Business Studies, 7*(1), 91-110. doi: 10.1108/SAJBS-04-2017-0048

Awang, Z., Afthanorhan, A., Mohamad, M., & Asri, M. (2015). An evaluation of measurement model for medical tourism research: the confirmatory factor analysis approach. *International Journal of Tourism Policy, 6*(1), 29-45.

Awang, Z., Hui, L., & Zainudin, N. (2018). Pendekatan Mudah SEM Structural Equation Modelling. *Bandar Baru Bangi: MPWS Rich Resources*.

Aziz, M. I., Afthanorhan, A., & Awang, Z. (2016). Talent development model for a career in Islamic banking institutions: A SEM approach. *Cogent Business & Management, 3*(1), 1186259.

Bach, T. M., da Silva, W. V., Souza, A. M., Kudlawicz-Franco, C., & da Veiga, C. P. (2020). Online customer behavior: perceptions regarding the types of risks incurred through online purchases. *Palgrave Communications, 6*(1), 1-12.

Barlett, C. P. (2019). Chapter 5 - Social Psychology Theory Extensions. In C. P. Barlett (Ed.), *Predicting Cyberbullying* (pp. 37-47): Academic Press.

Bebber, S., Milan, G. S., De Toni, D., Eberle, L., & Slongo, L. A. (2017). Antecedents of Purchase Intention in the Online Context. *Journal of Relationship Marketing, 16*(1), 82-98. doi: 10.1080/15332667.2016.1242396

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management science, 35*(8), 982-1003.

Esfandiar, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (2019). Understanding entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research, 94*, 172-182.

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research, 18*(1), 39-50. doi: 10.1177/002224378101800104

Hair, J. F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool. *Brazilian Journal of Marketing, 13*(2).

Han, M. C., & Kim, Y. (2017). Why consumers hesitate to shop online: Perceived risk and product involvement on Taobao. com. *Journal of promotion management, 23*(1), 24-44.

Han, T.-I., & Stoel, L. (2017). Explaining socially responsible consumer behavior: A meta-analytic review of theory of planned behavior. *Journal of International Consumer Marketing, 29*(2), 91-103.

Hasbullah, N. A., Osman, A., Abdullah, S., Salahuddin, S. N., Ramlee, N. F., & Soha, H. M. (2016). The Relationship of Attitude, Subjective Norm and Website Usability on Consumer Intention to Purchase Online: An Evidence of Malaysian Youth. *Procedia Economics and Finance, 35*, 493-502. doi: https://doi.org/10.1016/S2212-5671(16)00061-7

Kamalul Ariffin, S., Mohan, T., & Goh, Y.-N. (2018). Influence of consumers' perceived risk on consumers' online purchase intention. *Journal of Research in Interactive Marketing, 12*(3), 309-327. doi: 10.1108/JRIM-11-2017-0100

Kashif, M., Braganca, E., Awang, Z., & Cyril De Run, E. (2017). You abuse but I will stay: The combined effects of job stress, customer abuse, and emotional intelligence on employee turnover. *Journal of Management Development, 36*(7), 899-914. doi: 10.1108/JMD-06-2016-0095

Kashif, M., Zarkada, A., & Ramayah, T. (2018). The impact of attitude, subjective norms, and perceived behavioural control on managers' intentions to behave ethically. *Total Quality Management & Business Excellence, 29*(5-6), 481-501.

Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., & Abdullah, S. (2016). Factors influencing online shopping behavior: the mediating role of purchase intention. *Procedia Economics and Finance, 35*(5), 401-410.

Mainardes, E. W., Souza, I. M. d., & Correia, R. D. (2020). Antecedents and consequents of consumers not adopting e-commerce. *Journal of Retailing and Consumer Services, 55*, 102138. doi: https://doi.org/10.1016/j.jretconser.2020.102138

Pappas, N. (2016). Marketing strategies, perceived risks, and consumer trust in online buying behaviour. *Journal of Retailing and Consumer Services, 29*, 92-103.

Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A., & Siqueira-Junior, J. R. (2020). Purchase intention and purchase behavior online: A cross-cultural approach. *Heliyon, 6*(6), e04284. doi: https://doi.org/10.1016/j.heliyon.2020.e04284

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology, 88*(5), 879.

Poushter, J., Bishop, C., & Chwe, H. (2018). Social media use continues to rise in developing countries but plateaus across developed ones. *Pew Research Center, 22*, 2-19.

Purani, K., Kumar, D. S., & Sahadev, S. (2019). e-Loyalty among millennials: Personal characteristics and social influences. *Journal of Retailing and Consumer Services, 48*, 215-223.

Rehman, S. U., Bhatti, A., Mohamed, R., & Ayoup, H. (2019). The moderating role of trust and commitment between consumer purchase intention and online shopping behavior in the context of Pakistan. *Journal of Global Entrepreneurship Research, 9*(1), 43. doi: 10.1186/s40497-019-0166-2

Sabanoglu, T. (2020). Global retail e-commerce sales 2014-2023. Retrieved from https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/

Shaouf, A., Lü, K., & Li, X. (2016). The effect of web advertising visual design on online purchase intention: An examination across gender. *Computers in human behavior, 60*, 622-634.

Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. *International Journal of Bank Marketing, 36*(2), 357-378. doi: 10.1108/IJBM-12-2016-0186

Wang, Y.-S., Yeh, C.-H., & Liao, Y.-W. (2013). What drives purchase intention in the context of online content services? The moderating role of ethical self-efficacy for online piracy. *International Journal of Information Management, 33*(1), 199-208.

Yean, T. F., Johari, J., & Sukery, A. F. M. (2015). The influence of attitude, subjective norms, and perceived behavioural control on intention to return to work: a case of socso's insured employees. *Kajian Malaysia: Journal of Malaysian Studies, 33*.

Yusof, Y., Awang, Z., Jusoff, K., & Ibrahim, Y. (2017). The influence of green practices by non-green hotels on customer satisfaction and loyalty in hotel and tourism industry. *International Journal of Green Economics, 11*(1), 1-14.

Zaiţ, A., & Bertea, P. (2011). Methods for testing discriminant validity. *Management & Marketing Journal, 9*(2), 217-224.

Zhao, X., Deng, S., & Zhou, Y. (2017). The impact of reference effects on online purchase intention of agricultural products: The moderating role of consumers' food safety consciousness. *Internet Research, 27*(2), 233-255. doi: 10.1108/IntR-03-2016-0082