



Exploring the Adolescent Satisfaction and Behavioural Intentions Towards Online Shopping

Priscillia Etaup Philip^{1*}, Loly Gading Joseph², Gaudens Ngang Misin³, Priscilla Tommy⁴, Macson Manda Garry Enchang⁵, and Ai Kiat Teo⁶

^{1,2,3,4,5} Faculty of Business and Management, Universiti Teknologi MARA (UiTM) Sarawak Branch, Kota Samarahan, Sarawak, Malaysia
⁶ SMK DPHA Gapor, Kuching, Sarawak, Malaysia

¹pricilliaetaup@gmail.com; ²lolygadingjoseph@gmail.com;
³gaudens.nm@gmail.com; ⁴priscillaaktommy@gmail.com;
⁵macsonmanda@gmail.com; ⁶aikiat67@yahoo.com

*Corresponding Author

Received: 30 May 2023

Accepted: 28 October 2023

Published: 30 November 2023

ABSTRACT

This exploratory research aimed to examine the relationship between adolescent satisfaction and online shopping. A questionnaire survey was carried out to gauge the website quality, product and price issues for more effective online marketing. Sarawak teens participated in this survey research. Two hundred and eleven usable questionnaires were analyzed. The multi-item measures were found to be reliable and having satisfactory internal consistency. Multiple regression analysis was done to examine the relationship between online shopping and adolescent satisfaction and behavioural intentions. The findings indicated that they had a favourable attitude towards online purchasing. The website quality and user interfaces had a significant impact on the adolescent satisfaction. The results indicated the importance of perceived ease of use, perceived security, perceived trust, perceived convenience, perceived usefulness, and perceived price in influencing adolescent satisfaction and behavioural intentions.

Keywords: adolescent satisfaction; online shopping; purchase intention



This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0>).

INTRODUCTION

eCommerce and online shopping are common opportunities and challenges in the era of digital economy. Adolescents have a strong affinity for online shopping, which has increased throughout the pandemic and includes vital commodities. This study examines the potential impact of technology on consumer behaviour, notably the rise of social media and online commerce. It focuses on analysing adolescents' online purchasing experiences, specifically perceived ease of use, site quality, security, usefulness, convenience, and pricing. The eCommerce managers and practitioners will gain much if they know how these adolescent factors will influence the consumers' and users' behavioural intentions (Patocka, 2022). This research will help to improve online service quality management and digital marketing dynamics in the challenging digital age.

LITERATURE REVIEW

Perceived Ease of Use

The importance of usability in online purchasing systems cannot be overstated. The ease of use of the online shopping sites needs to be well understood for development and even review of digital marketing strategies. Darmawan (2021) and Yen and Lu (2008) note its positive relationship with satisfaction and repurchase intentions. However, it is vital to evaluate how the idea of ease of use is defined and quantified among researchers. Understanding the role of perceived ease of use among the relatively more IT savvy teens will be necessary. Therefore, it is hypothesized that:

H1: There is a significant relationship between the perceived ease of use of online shopping site on adolescent satisfaction.

Perceived Security

Security is unquestionably an important component of internet shopping (Kanimozhi & Kamatchi, 2017; Pavlou, 2003; Wai et al., 2019). While Rane and Meshram (2012) discussed critical factors such as transaction security and personal data security, more investigation is required to determine the effectiveness and perception of these security

measures for adolescents. Given the ever-changing landscape of internet security dangers, it is critical to assess whether the present practices are aligned with the specific requirements and concerns of the adolescent customers. The hypothesis is:

H2: There is a significant relationship between the perceived security of online shopping site and adolescent pleasure.

Perceived Site Quality

Website quality is essential for user satisfaction (Belanger et al., 2002; Voon & Kueh, 2011; Zaidi et al., 2014; Zhou et. al., 2009) provide useful insights into the importance of website quality in online commerce. However, the trust-building processes and cultural background in Sarawak should be assessed closely to determine their applicability to the local teenage population. It is also necessary to investigate how site quality emerges in the context of dynamic online buying platforms and marketplaces.

H3: There is a significant association between adolescent happiness with online buying and site quality in online shopping.

Perceived Usefulness

The perceived usefulness is a critical driver for online customers' acceptability (Davis, 1989; Lagita & Briliana, 2018; Ramayah & Ignatius, 2005; Ventre & Kolbe, 2020). However, in the context of the adolescent customers, a more in-depth examination of the specific items that contribute to perceived usefulness is necessary. Understanding the distinct drivers of usefulness for this target group can aid in tailoring online purchasing experiences to better meet their IT-related requirements.

H4: There is a significant relationship between the usefulness of online shopping and adolescent satisfaction.

Perceived Convenience

One of the reasons why people buy goods or services online is because it is convenient. The perceived convenience is critical in driving

user acceptability. However, a more in-depth examination of the specific factors that contribute to perceived convenience is required. Understanding the distinct drivers of convenience for this group can aid in tailoring online purchasing experiences to better fit their requirements.

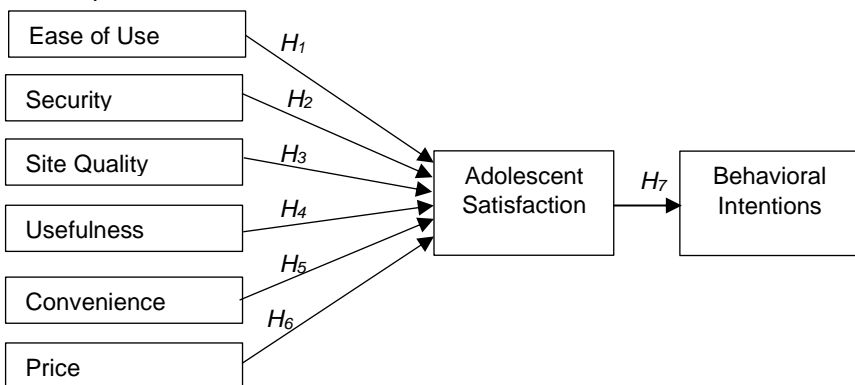
H5: There is a significant relationship between perceived convenience and adolescent satisfaction with online shopping.

Perceived Price

Various studies emphasise the critical role of price considerations for consumers, especially among the customers who have lower purchasing power (Khan et al., 2015). It is useful to carefully examine how pricing affects adolescent happiness. Is the pricing structure in line with the financial situations of the youths, and how much do their pricing perceptions influence their purchase decisions? These elements necessitate thorough investigation to contribute to a more comprehensive understanding of adolescent satisfaction and behavioural intentions. The hypothesis is:

H6: The perceived price in online shopping has a significant relationship with adolescent pleasure.

Figure 1
The Graphical Model



If the users are satisfied, most probably they will have a positive attitude towards the online shopping platform and will it recommend to others. They themselves will most probably purchase the products again. Hence, the seventh hypothesis (H₇).

METHODOLOGY

This descriptive research involved the use of the structured questionnaire survey on the adolescents in Sarawak. This section will discuss further on the design, measurement, operational definition terms, data collection method, population, and sampling technique as well as the instrument had been used for getting the data. This research is important due to the fast development of online shopping is becoming more popular amongst adolescents. The multi-item measures for the independent variables are shown in Table 1.

Table 1
The Multi-item Measures

Variables	Dimension and Items	Sources
Perceived Ease of Use	<ol style="list-style-type: none"> 1. The platform is easy to use for purchasing. 2. Easy to search the product information. 3. Ease to learning the shopping platform. 	Voon & Kueh (2011)
Perceived Security	<ol style="list-style-type: none"> 1. Online shopping platform is safe to use. 2. Provides insurance coverage for damage/protection. 3. Provides data privacy of customer email/phone. 4. Reliable system and flow of payment method. 	Wai et al. (2019) Voon & Kueh (2011)
Site Quality	<ol style="list-style-type: none"> 1. The description of product very accurate. 2. Online shopping platform has fast response. 3. High-quality photos and video of product 4. The sites of design are attractive. 5. The sites provide good quality of service. 	Belanger et al., 2002); Voon & Kueh (2011)
Perceived Usefulness	<ol style="list-style-type: none"> 1. It provides number of variants in product line. 2. The features have more subcategory options. 3. Has feature for return and customer support. 4. Has user review and ratings about the product. 5. Product delivered in good condition. 	Davis (1989)
Perceived Convenience	<ol style="list-style-type: none"> 1. The product can be delivered to any state. 2. Can select the cheaper price in the platform. 3. Able to purchase the product that been wanted. 4. Easy to follow the product classification. 5. User-friendly online shopping sites 6. No demand to complete the payment. 7. Offer multiple payment option 	Jiang et al. (2013)
Perceived Price	<ol style="list-style-type: none"> 1. Online shopping platform has a low cost. 2. The product provides good value of money. 	Khan et al., (2015)

The items for measuring the satisfaction are: ‘Overall, I am satisfied with the service and delivery of online shopping’, ‘I have good experience with online shopping sites’, ‘I have good experience with online shopping sites’, ‘This online shopping platform fulfills my needs and meets my expectations’, and ‘I can accomplish my shopping goals through online shopping’. The Behavioral Intentions were measured using ‘I would like to recommend my family and friend to use online shopping’, and ‘I would continue to be shopping online in future’.

The respondents in this study are aged between 13 to 24 years and the data was collected from different regions across Sarawak. A total of 221 respondents took part in the survey. The sample size is crucial since it allows for the effective collection of complete data. To ensure the representativeness of this sample size, several demographic criteria such as gender, education level, ethnicity, and geographical area were used as the controlled characteristics. The survey topics and questions were developed to collect important information about aspects such as ease of use, security, trust, usefulness, convenience, and pricing, which may influence teenage satisfaction and purchase intentions in the context of online shopping.

Data collection was carried out after figuring out strategies of the design. This study requires the availability of questionnaires to obtain data. The questionnaire that was used mostly consisted of closed ended question with fixed answers. To construct the questionnaire, Google Form was used. Furthermore, since the targeted audience was adolescents, it was given mostly to students and relatives who were in the targeted range of age group in Sarawak. The software, IBM Statistical Package the Social Science (SPSS) was used to analyze the data obtained from the questionnaire. Reliability analysis was done on the intended variables and the items, then the regression analysis to examine the hypothesized relationships.

FINDINGS AND DISCUSSIONS

A total of 221 adolescent respondents from all over Sarawak participated in this questionnaire survey. However, from the responses 10 respondents were rejected because the data was deemed incomplete and invalid. The data was collected via Google Form, which was disseminated to the targeted adolescent age groups of between 13 to 24 years old (see Table 2).

Table 2
Respondent Profile (n=211)

VARIABLES	No	%
Gender		
Male	95	45
Female	116	55
Age		
13-17 years	39	18.5
18-24 years	172	81.5
Ethnicity		
Iban	60	28.4
Malay	42	19.9
Chinese	33	15.6
Orang Ulu	30	14.2
Bidayuh	27	12.8
Melanau	15	7.1
Others	4	1.9
Occupation		
Student	117	55.5
Private Sector	46	21.8
Government Sector	30	14.2
Unemployment	18	8.5
Level of Education		
Secondary	67	31.7
Diploma/Certificate	48	22.7
Bachelor's degree	85	40.3
Post-graduate	11	5.2
Averagely how much do you spend on online shopping?		
RM50 or below	54	25.6
RM51 - RM100	60	28.4
RM101 - RM500	84	39.8
RM500 and above	13	6.2
How often do you use online shopping platform per month?		
None	14	6.6
1-2 time(s)	106	50.2
3-5 times	81	38.4
6 times and above	10	4.7
Which online shopping platform do you prefer?		
Shopee	118	55.9
Shein	39	18.5
Lazada	19	9.0
Zalora	18	8.5
Mudah	5	2.4
Zilingo	5	2.4
Others	7	3.3

Table 3 shows the reliability test of each variable for the model which is the dimensions that effects adolescent’s satisfaction towards online shopping. The dimensions that have the very high coefficient of Cronbach’s Alpha are perceived site quality and perceived convenience (i.e., 0.897). All the variables are found to be reliable with good internal reliability consistency.

Table 3
Reliability and Validity

Variables	Cronbach 's Alpha
Perceived Ease of Use	0.845
Perceived Security	0.887
Perceived Site Quality	0.897
Perceived Usefulness	0.873
Perceived Convenience	0.897
Perceived Price	0.779

The reliability scores for Adolescent Satisfaction and Behavioral Intentions are also found to be satisfactory. The Cronbach’s Alpha coefficient for the 4-item Adolescent Satisfaction is 0.892 whereas the 2-item Behavioural Intention is also 0.892.

The results of multiple regression analysis are shown in Table 4. The R value is 0.765, indicating rather strongly and significant correlations among the variables of perceived of ease of use, perceived security, perceived trust, perceived usefulness, perceived convenience, and perceived price. Besides, the R square stands at 0.571 suggesting that the independent variables account for 57.1% of the variance in the adolescent’s satisfaction on the online shopping. Perceived convenience is the most important determinant (i.e., Standardized coefficient of 0.444) for the satisfaction.

The F-ratio indicates the regression model was generally significant because the independent variables were statistically relevant to the dependent variable where $F(6, 204) = 45.207, p < 0.001$. This indicates three independent variables combine to show the significant effect on the dependent variable.

The perceived convenience (at 5% level of significance), security and usefulness (significant at 10% level of significance) have positive impacts on adolescents’ satisfaction with online shopping. As such the roles

of these independent variables on the adolescent satisfaction with internet shopping should be well understood and managed accordingly for effective online marketing to serve this segment of online customers.

Table 4
Multiple Regression Analysis on Factors Affecting the Adolescent Satisfaction

Variables	Unstandardized		Standardized		t	Sig.
	Co-efficient		Beta			
	B	Std Error	Beta			
Constant	.818	.212			3.856	.000
Ease of Use (H ₁)	-.010	.071	-.011		-.144	.886
Security (H ₂)	.112	.062	.138		1.799	.074
Site Quality (H ₃)	.036	.105	.039		.346	.730
Usefulness (H ₄)	.195	.108	.199		1.801	.073
Convenience (H ₅)	.464	.133	.444		3.492	.001
Price (H ₆)	.004	.089	.004		.040	.968

a. Dependent Variable: Adolescent Satisfaction

b. Predictors: (Constant), Ease of Use, Security, Site Quality, Usefulness, Convenience, Price

The results do not show significant relationships between the perceived ease of use, site quality and price aspects of online shopping platforms and adolescent satisfaction (H₁, H₃, H₆). However, the analysis results reveal a considerable and favourably significant association between adolescents' perceived security and their satisfaction with online shopping (H₂). The p-value of 0.000 indicates that the influence of perceived security on adolescent pleasure is clearly significant. Furthermore, the positive beta value reveals a substantial positive association between these two variables, emphasising the critical significance of security perceptions in moulding and improving adolescent satisfaction.

This study reveals a considerable and favourably significant association between perceived usefulness and the level of satisfaction of adolescents who buy online (H₄). The data analysis reveals a positive link, with an unstandardized coefficient of 0.170 and significant at 10% level of significance. This indicates the importance of perceived usefulness in determining satisfaction.

There is considerable and favourably significant association between convenience and the level of satisfaction of adolescents who buy online (H₅). With a p-value of less than 0.001, the statistical analysis indisputably validates this association, highlighting its high level of statistical significance. The results imply that as the perceived convenience

increases there will most probably a significant increase in the adolescent satisfaction with the online shopping.

The simple regression results indicated that the adolescent satisfaction has a positive effect on their behavioural intentions. The total variance explained is 43.9% (R-square is 0.439), t-value is 12.779 (p=0.000). hence, the hypothesis H₇ is supported.

The results in Table 5 suggest that the factors which have significant effects on the adolescents’ behavioural intentions are the Security and Site Quality. All the six factors contributed 96.2% of the variance in the dependent variable. The most important factor is the website quality of the online shopping platform (significant at 1% level of significance).

Table 5
Multiple Regression Analysis on Factors Affecting the Behavioural Intentions

Variables	Unstandardized		Standardized	t	Sig.
	Co-efficient B	Std Error	Beta		
Constant	-.060	.070		-.858	.392
Ease of Use (H ₁)	.014	.023	.013	.580	.563
Security (H ₂)	-.036	.021	-.040	-1.749	.082
Site Quality (H ₃)	.999	.034	.973	29.064	.000
Usefulness (H ₄)	.042	.036	.039	1.183	.238
Convenience (H ₅)	-.015	.044	-.013	-.351	.726
Price (H ₆)	.011	.029	.011	.368	.713

a. Dependent Variable: Behavioural Intentions

b. Predictors: (Constant), Ease of Use, Security, Site Quality, Usefulness, Convenience, Price

CONCLUSION AND RECOMMENDATIONS

According to the findings, it is evident that the adolescents’ perceived convenience, security, and usefulness have significant influences on their satisfaction and their satisfaction will affect their behavioural intentions. Among the recommendations of this study is to do further research on making a policy to educate adolescents about digital literacy, which means by incorporating education about digital literacy, cybersecurity and internet marketing into the curricula of schools as this is an effective way to provide students with the necessary knowledge and skill they need to properly navigate online platforms, comprehend privacy settings, and recognize possible threats that can be found online. It will be good to promote

consumer protection regulation whereby adolescents need to be protected from the unethical business practices, misleading marketing, and potentially hazardous products, all of which can be found on the internet. Consumer protection laws that are specific to online shopping need to be enacted and enforced. Adolescent consumers will make sure that online merchants they are dealing with are honest about the specifications and features of their products, their return policies, and their customer service.

These empirical findings enhance the literature by revealing adolescent satisfaction with internet shopping and its effects on their behavioural intentions. This exploratory survey research is a useful reference for future research in the similar fields. Future research may benefit from qualitative data collection, possibly using face-to-face interviews instead of questionnaires, to improve the reliability and validity of the findings as scientific insights which could further enhance the digital marketing effectiveness and sustainability.

CONTRIBUTIONS OF AUTHORS

The authors hereby affirm that they have made equal contributions to all aspects of this research, publication, and the related editing works.

FUNDING

This work received no specific grant from any funding agency.

CONFLICT OF INTEREST

All authors declare that they have no conflicts of interest.

ACKNOWLEDGEMENT

We express our gratitude to the reviewers and editors for their valuable insights in enhancing the manuscript, as well as to the respondents who participated in the survey.

REFERENCES

- Belanger, F., Hiller, J. and Smith, W. (2002) Trustworthiness in Electronic Commerce: The Role of Privacy, Security, and Site Attributes. *Journal of Strategic Information Systems*, 11, 245–270. [http://dx.doi.org/10.1016/S0963-8687\(02\)00018-5](http://dx.doi.org/10.1016/S0963-8687(02)00018-5)
- Darmawan, D.–(2021). Understanding Impulsive Buying Behavior in Marketplace. *Journal of Social Science Studies*, 1(1), 11–18. <https://doi.org/10.56348/jos3.v1i1.2>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Kanimozhi, G. & Kamatchi, K.S. (2017). Security Aspects of Mobile Based E Wallet. *International Journal on Recent and Innovation Trends in Computing and Communication*, 5(6), 1223–1228. <https://doi.org/10.17762/ijritcc.v5i6.931>
- Jiang, L., Yang, Z., & Jun, M. (2013). Measuring consumer perceptions of online shopping convenience. *Journal of Service Management*, 24(2), 191–214. <https://doi.org/10.1108/09564231311323962>
- Khan, S. A., Liang, Y., & Shahzad, S. (2015). An Empirical Study of Perceived Factors Affecting Customer Satisfaction to Re-Purchase Intention in Online Stores in China. *Journal of Service Science and Management*, 8, 291–305. <http://doi.org/10.4236/jssm.2015.83032>
- Lagita, L., & Briliana, V. (2018). Influence of customer satisfaction, adjusted expectation, perceived value, dan perceived usefulness towards online repurchase intention customer Lazada. *Journal of Economic Micro Skill*, 8(1), 37–48. <https://doi.org/10.55601/jwem.v8i1.528>
- Patocka, Z. (2022, November 11). In Stores with “Millennials on Steroids”: Generation Z Shopping Habits. *Bluestone PIM*. <https://www.bluestonepim.com/blog/in-stores-with-millennials-on-steroids-generation-z-shopping-habits>
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134. <https://ssrn.com/abstract=2742286>
- Ramayah, T., & Ignatius, J. (2005). Impact of Perceived usefulness, Perceived ease of use and Perceived Enjoyment on Intention to shop online. *Journal of System Management*, 3(3), 36–51. <https://ramayah.com/journalarticlespdf/impactpeu.pdf>

- Rane, P. B., & Meshram, B. B. (2012). Transaction Security for E-commerce Application. *International Journal of Electronics and Computer Science Engineering*, 1(3), 1720–1726. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=df35e3f2005c01330737e488af8975fa9c79874f>
- Ventre, I., & Kolbe, D. (2020). The impact of perceived usefulness of online reviews, trust and perceived risk on online purchase intention in emerging markets: A Mexican perspective. *Journal of International Consumer Marketing*, 32(4), 287–299. <https://doi.org/10.1080/08961530.2020.1712293>
- Voon, B. H., & Kueh, K. (2011). Feelings: The key dimension of website service quality. *Proceedings of 2nd International Conference on Public Policy & Social Sciences (iCoPS 2011)*, 31 Oct-1 Nov 2011, Kuching.
- Wai, K., Dastane, O., Johari, Z., & Ismail, N. B. (2019). Perceived risk factors affecting consumers' online shopping behaviour. *J. Asian Financ. Econ. Bus.*, 6, 246–260. <https://doi.org/10.13106/jafeb.2019.vol6.no4.249>
- Yen, C., & Lu, H. (2008). Factors influencing online auction repurchase intention. *Internet Research*, 18(1), 7–25. <https://doi.org/10.1108/10662240810849568>
- Zaidi, S. D. A., Gondal, B. J., Yasmin, A., Rizwan, M., & Urooj, M. (2014). Antecedents of online shopping intention: A study held in Pakistan. *Journal of Sociological Research*, 5(1), 231–247. <http://doi.org/10.5296/jsr.v5i1.6564>
- Zhou, T., Lu, Y., & Wang, B. (2009). The Relative Importance of Website Design Quality and Service Quality in Determining Consumers' Online Repurchase Behavior. *Information Systems Management*, 26(4), 327–337. <https://doi.org/10.1080/10580530903245663>

