

ONLINE SHOPPING MOTIVES AND BEHAVIORAL INTENTIONS: MODERATING EFFECTS OF AGE AND FREQUENCY OF ONLINE SHOPPING

Mastura Roni ¹
Siti Hajar Mohamad ²
Fadhilah Zainal Abidin ³

¹ Faculty of Business and Management, Universiti Teknologi MARA Melaka, Melaka, Malaysia.

Email: masturroni@uitm.edu.my

² Mizsiti Knit Cotton, Melaka, Malaysia.

Email: mizsiti@gmail.com

³ Faculty of Hotel and Tourism, Universiti Teknologi MARA Melaka, Melaka, Malaysia.

Email: fadhilah0109@uitm.edu.my

Article history

Received date : 1-3-2022

Revised date : 2-3-2022

Accepted date : 25-6-2022

Published date : 1-8-2022

To cite this document:

Roni, M., Mohamad, S. H., & Zainal Abidin, F. (2022). Online Shopping Motives and Behavioral Intentions: Moderating Effects of Age and Frequency of Online Shopping. *International Journal of Accounting, Finance and Business (IJAFB)*, 7(41), 359 - 366.

Abstract: *This study attempts to examine the role of hedonic and utilitarian antecedents of behavior on behavioral intention and encompasses age and frequency of online shopping as moderator variables to further evaluate the association among online shopping motives and behavioral intention in the context of online food delivery during Covid-19 pandemic in Malaysia. The study seeks to measure perceived usefulness, internal subjective, external subjective and hedonic motivation on predicting the behavioral intention amongst online food delivery customers on behavioral intention. The descriptive survey research design was utilized for this study. The target population was the online food delivery customers during Covid-19 pandemic in Malaysia. By using a convenient sampling technique, 135 sample participants were selected from the target population. The reliability scales were tallied by using Cronbach's Alpha. The findings of the study are gleaned by using regression to investigate the role online shopping motives towards behavioral intention and whether age and frequency of shopping moderated the association between online shopping motives and behavioral intention. Through Statistical Package of Social Science (SPSS), Hayes process was used regarding the moderation effect. The main results of regression analysis validated that perceived usefulness, perceived ease of use and normative motives have a significant and positive effect on online purchase behavior intentions compared to hedonic motivation. Specifically, the study suggests that frequency of online shopping significantly moderates the perceived usefulness on the behavioral intention amongst online food delivery consumers during the pandemic.*

Keywords: *Online shopping, behavioral intention, moderator, age, frequency online shopping*

Introduction

The emergence of Covid-19 which has hit the world has had a very profound impact around the world. To date, almost the entire world is still feeling the negative effects of the virus spread and is still looking for the best solution to overcome this problem. The world is not only changing in terms of population, but the business landscape is also receiving its temps. The movement constraints implemented in Malaysia, for example, have triggered various online business platforms, especially in the context of delivering food to customers who unable to dine-in in their favourite restaurants. Therefore, companies began to introduce online food delivery to meet the needs of customers. Among the available companies are GrabFood, FoodPanda, ShopeeFood, Airasia food, EASI (Hungry), Bungkusit up, DeliverEat, and LOLOL.

Many researchers have investigated utilitarian and hedonic motives of online shopping behaviour. However, the relative importance of each of these dimensions remains unclear. Moreover, a review of the academic literature reveals that the role of hedonic and utilitarian motives in predicting consumer behaviour is still not fully understood. This research aims to contribute to existing knowledge in the field by clarifying how hedonic and utilitarian motives apply in the context of a pandemic during Covid-19 outbreak in Malaysia. This study also would like to reveal the moderating effects of age and frequency of online shopping in the relationship of online shopping motives and behavioural intention in the context of online food delivery services.

Literature Review

Online Shopping Motives and Behavioral Intention

Drawing from a review of the existing literature in the field of e-commerce adoption, this study examines hedonic and utilitarian antecedents of behaviour as suggested by (Van et al., 2003) and accounts for subjective norms as an additional determinant. The current pandemic situation and MCO implementation in Malaysia has opened a great online business opportunity and customers have been forced to make purchasing and food delivery through online platforms such as Food Panda and Grab Food, rather than going to a physical restaurant. This resulted in many online retailers beginning to develop new product recommendations and sales strategies because of the Covid-19 pandemic and drives e-commerce platform.

Perceived usefulness implied a perception that shopping performance would be increased as a result of online shopping activities and customers adopt certain products based on their perception that the product brings value and usefulness (Aw et al., 2021), as well improve their shopping performance. While Perceived ease of use (PEU) is the individual perception associated with the adoption of a new system or technology without putting any effort and even no need to pay, thus become the motives to do online shopping. Customers who regularly perceived ease of use are positively influenced by the online shopping facilities that will meet their expectation and useful. Next is normative motives which also known as normative influences and subjective norms that is usually assessed in the context of consumer behaviour studies (Koch et al., 2020). Normative influence may be interpersonally communicated, often comes from interpersonal sources. Lastly, hedonic motives assess how much consumers feel about online shopping and focusing on the fun of doing the activity in the shopping application. The link between hedonic motives and behavioural intention has been found in previous research; those who valued hedonic shopping behaviours will contributes to behavioural intentions (Nejati et al., n.d.).

Moderating Role of Age and Frequency of Shopping in Online Shopping Motives and Behavioral Intention

Age is another critical demographic factor that plays an important role in explaining consumer behaviour. Notably, younger people tend to be more enterprising and adventurous than older people and fairly good with technological devices, so they are more likely to accept to use new technologies. Most previous studies have proved age differences in adopting new technology, suggesting that a negative relationship between increasing age and intention to adopt a new technology (Jinsoo et al., n.d.). However, (Ghalandari et al., 2012) found that age moderated the relationship between performance expectancy, effort expectancy, social influence and facilitating conditions on acceptance of E-banking services. Therefore, this study hypothesized that the online shopping motives and behavioural intention is moderated by age (H1a, H1b, H1c, H1d).

Another control variable in this study is frequency of online shopping. There are limited study found assessing the moderation effects using frequency of online shopping. However, it is understood that the higher transaction number that we do during online shopping, the higher our intention to purchase. Thus, this study proposed the following hypotheses to examine whether frequency of online shopping moderates the relationship between online shopping motives and behavioural intention (H2a, H2b, H2c and H2d).

Theoretical framework

The theoretical framework of this study is depicted in Figure 1. Focus of this study is the moderation effect of age and frequency of online shopping in the relationship between online shopping motives and behavioral intention.

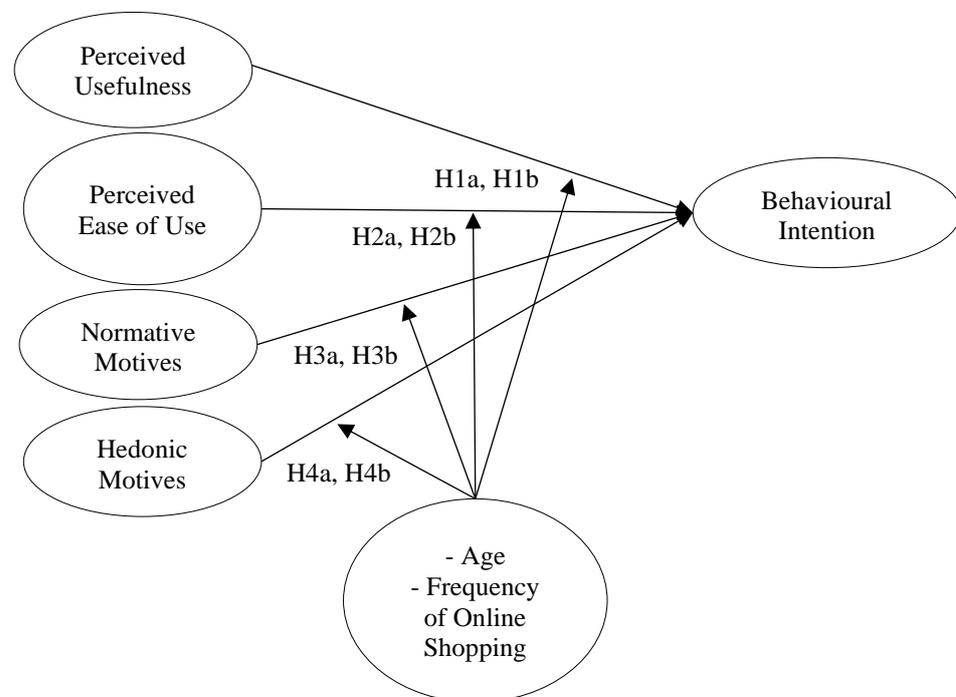


Figure 1: Theoretical framework of online shopping motives and behavioral intention

Methodology

The deductive research approach will be applied and the study will be designed within exploratory and descriptive research categories. A survey research strategy will be chosen and conducted by using self-administered questionnaires to collect quantitative data at a single point of time, cross-sectionally. Moreover, the research elaborates details of research methodologies in regard to sampling procedures and questionnaire development.

The sampling procedure will be done in three steps. First, the sampling population will be identified. Online consumer in Malaysia are selected to serve as the sampling population. Second, the respondents will choose based on their recent experience of availing the online food delivery services from social media network. Third, a sample size of 500 online consumers of generations Y and Z will be drawn using a convenience sampling method.

The self-administered online questionnaire will be developed for data collection in three stages. First, a number of questions will be developed based on previous similar studies and relevant literature in accordance with the hypotheses proposed. Second, a questionnaire pre-test will be conducted to determine the accuracy and consistency of the responses. This included telephone interviews. Last, the reliability and validity of the questions will be examined. Revision will be based on feedback from interviews and statistical analysis. The questionnaire will be translated into the Malay language to facilitate the respondents' completion using standard translation and back-translation methodology. When the questionnaire is ready, online survey form was sent out to 500 Malaysian online consumers.

Data Analysis

Statistical Package for Social Sciences (SPSS) Version 25 (IBM: Chicago, USA) was used for data analysis. The major results of all variables in this study were established by Cronbach's alpha reliability test, descriptive and correlation tests, and Hayes process moderation.

Results

Reliability Analysis

A Cronbach's alpha reliability range above 70% for each variable indicates that the collected data is reliable (Holahan et al., 1995). Hair et al. (Hair et al., 2003) recommended that given data would be considered reliable if the alpha value was greater than 60 percent (Manzoor et al., 2019). In Table 1, the results of the Cronbach's alpha showed that inclusive data is observed within a given reliability range.

Table 1: Measures of Various Online Shopping Motives

Variables	No. of Items	Alpha Value	Comments
Behavioral intention	3	.92	Reliability of 0.60 and 0.70 or more than 0.70 is the standard criteria for demonstrating the internal consistency of new and recognized scales (10)
Perceived usefulness	4	.89	
Perceived ease of use	4	.93	
Normative motives	6	.94	
Hedonic motives	3	.91	

Descriptive Statistics and Correlation

Mean, standard deviation, and correlation of the variables are stated in Table 2. Correlation analysis is used as a productive approach to test the relationship between the two variables, whether it is solid or weak (Mukaka et al., 2012). Behavioral intention is positively correlated with perceived usefulness ($r = 0.76$, $p < 0.01$), perceived ease of use ($r = 0.58$, $p < 0.01$), normative motives ($r = 0.81$, $p < 0.01$), and hedonic motives ($r = 0.74$, $p < 0.01$). These results support the main hypotheses of the study.

Table 2: Mean Standard Deviation and Correlation

Variables	Mean	Std. Dev.	1	2	3	4	5
Behavioural intention	3.72	1.06	1				
Perceived usefulness	3.90	.90	.76**	1			
Perceived ease of use	4.02	.86	.58**	.81**	1		
Normative motives	3.79	0.90	.81**	.78**	.73**	1	
Hedonic motives	3.85	.94	.74**	.78**	.75**	.86**	1

**Correlation is significant at the 0.01 level (2-tailed)

Hayes Process Moderation Analysis

We employed Hayes process (version 4) (Hayes et al., 2013) through the computer software SPSS (version 25) to confirm the moderation hypotheses for the present study. To analyse the direct effect of perceived usefulness, perceived ease of use, normative motives and hedonic motives, we used regression analysis technique, as well as for moderation impact of behavioural intention, we used Hayes process. In Table 3, Hayes process (Rese et al., 2014) moderation (age and frequency of online shopping) are discussed regarding moderation effect of age and frequency of online shopping between online shopping motives and behavioral intention.

In Hypothesis H1a, H1b, H1c, H1d, the present study predicted that moderator of age has not significant and negative effect on behavioral intention. Thus, the index of moderation was not significant, indicating the meaning in age did not moderate the relationship between perceived usefulness, perceived ease of use, normative motives and hedonic motives has not significant effect on interaction of age toward behavioral intention. Thus, this study rejected hypotheses H1a, H1b, H1c and H1d.

In Table 3, findings showed that $p = 0.0315$, so these results support Hypothesis H2a. In hypothesis H2a, the present study predicted that perceived usefulness on moderator of frequency of online shopping has significant and positive effect on behavioral intention. While, the moderator of frequency of online shopping toward hypotheses H2b, H2c and H2d has p value more than 0.05, thus these outcomes do not support all the listed hypotheses. Furthermore, H2b, H2c and H2d are rejected because moderator of frequency of online shopping toward perceived ease of use, normative motives and hedonic motives has a negative and not significant influence on behavioral intention.

Table 3: Online shopping motives with inclusion of moderation and behavioural intention (hayes process moderation)

H	Variable	Coefficient	SE	T	p*	Decision
Moderation: Age x Behavioural Intention						
H1a	Perceived Usefulness	-.0678	.0692	-.9791	.3293	Rejected
H1b	Perceived Ease of Use	.0214	.1081	.1976	.8437	Rejected
H1c	Normative Motivation	-.0367	.0745	-.4929	.6229	Rejected
H1d	Hedonic Motivation	-.0603	.0803	-.7507	.4542	Rejected
Moderation: Frequency of Online Shopping x Behavioural Intention						
H2a	Perceived Usefulness	-.0917	.0422	-2.174	.0315*	Accepted
H2b	Perceived Ease of Use	-.0778	.0525	-1.481	.1409	Rejected
H2c	Normative Motivation	.0227	.0378	.6006	.5492	Rejected
H2d	Hedonic Motivation	.0281	.0426	.6591	.5110	Rejected

Discussion and Conclusion

Discussions

Results of the study have enhanced understanding of the relational factors that either drive or impede user intention to use food delivery apps, and provide insight for food service industry management to develop strategies for their businesses to remain competitive.

Specifically, this research empirically examined proposed framework, which incorporates online shopping motives as an important driver toward behavioral intention. Second, we explored the moderating role of customer age and frequency of customer buying food online proposed in the framework, thereby offering more refined insight into the dynamics characterizing the proposed relationship. Specifically, while we identified a significant, strong effect on online shopping motives for younger customers (30 years of age and below), this effect was negligible for older customer (30+). This result indicates customer's age during shopping food online is not influence them to buying online.

Surprisingly, from the results of the moderating effect analysis, it shows that the younger adult group is more sensitive to buying online than the middle and elderly group. A possible explanation for this might be that younger adult group use Internet-based social networks more often than the other, therefore, they are exposed to an environment where social influence plays a relatively important role in the decision-making process. The middle and elderly group, however, are more sensitive to facilitating conditions than the younger adult group, indicating that their perceived confidence level in handling the food ordering online technology affect behavioral intention to use it. In other words, an intuitive and easy user interface is necessary to increase the adoption rate among the middle and elderly groups.

The second moderating result on frequency of food online shopping showing a perceived usefulness only has significant effect to behavioral intention. This result extends the literature on perceived usefulness of mobile apps (Lee & Choi, 2003). When shopping online, consumers have perceived risk concerns about the attributes, exchanges/refunds, and delivery of a product. Consumers, therefore, search for a variety of information to reduce risk, and, thus, consumers' reviews can be a strong indicator of perception of level of risk (Liu & Park, 2015) found that consumers judged extreme Further, when the ratings were negative, consumers perceived the information to be more useful. Therefore, administrators of food delivery apps should be aware that negative reviews mean that consumers perceive the apps as more useful, and that, counter-

intuitively, negative reviews should not be removed. Further, when the identity of the reviewer is revealed, it strongly influences the usefulness of online reviews (Ali et al., n.d.). This suggests the reviewer's real name, rather than a registered form of identification, such as a username, should be used in online reviews.

Conclusions and Recommendation

One surprising finding of this research is age not moderate online shopping motives to behavioral intention of food delivery apps. This finding challenge traditional food delivery behaviour literature analysing online food buying as a leisure time activity suggesting that the role of age in an online buying context must be reframed.

Moreover, company managers interested in the target market (i.e., consumers) with low involvement in technology would be suggested to concentrate on a strategic solution such as communication with their consumers. For example, an organization needs to design an advertising strategy by focusing on minimizing the uncertainty level among those consumers who have high insecurity and discomfort levels with new technology (Liu & Park, 2015). They can use a well-known celebrity as an endorsement to enhance their trust level with the new technology introduced by a particular company. In this way, they can influence the optimistic and innovative consumers along with insecure and discomfort consumers by offering potential benefits to enhance the usage frequency level of new technology among targeted.

This study has several empirical and managerial implications along with a few limitations that can be considered in future researches. First, the respondents of the current survey are online food delivery service users in Malaysia, and the findings of study cannot be generalized to different countries with different cultures. Future researchers can include online food delivery service users from different countries and can generalize the results across a wider population. Second, the study is cross-sectional, and future studies can re-investigate this model by using experimental and longitudinal data to examine the variation in the constructs' relationships. Third, this study emphasizes online food delivery service users only. Thus, the findings cannot be implemented to other setups in the foodservice sector (e.g., online delivery of fresh fruits and vegetables). Therefore, future examiners need to consider issues regarding sellers, employees, and delivery workers involved in the food sector. Finally, online reviews are considered a more crucial source of information for consumers to make effective purchase decisions and to offer more benefits to them. Similarly, online reviews in the form of open innovation also provide value to organizations. They perform as a source of continuous improvement in the product and service, enhance sales, and facilitate organizations to build a long-term association with customers. However, they play a major role in the marketing end over of organizations. The growing importance of online reviews has opened new avenues of research for academicians and practitioners to study how online reviews can impact consumer intention to use online food ordering service systems during the Covid-19 pandemic situation. Due to the Covid-19 pandemic, existing behaviours and structures are being questioned. As crises can trigger fundamental economic and societal changes, companies need to understand consumer behaviour at this particular time. The trends established during this crisis may remain stable into the future, inflicting serious consequences on brick-and-mortar stores due to a rapid increase in e-commerce. We assume that during the current crisis, customers are spending more time online, and we find that perceived usefulness exert the strongest influence on generation Y and Z consumers' behavioural intentions to buy food online. Furthermore, we find that external normative pressures influence individuals' purchase intentions, while a close social network consisting of family and friends does not. Our study suggests that companies can

induce purchasing behaviour by strategically harnessing normative influences and that sophisticated online platforms and transparent communication are of great importance during this crisis.

References

- Ali S., Khalid N., Usama Javed H.M. & Zahurul Islam D.M., Consumer Adoption of Online Food Delivery Ordering (OFDO) Services in Pakistan: The Impact of the COVID-19 Pandemic Situation. *Journal of Open Innovation: Technology, Market and Complexity*.2021, 7, 10, 1-23.
- Aw, E. C. X., Kamal Basha, N., Ng, S. I., & Ho, J. A. .Searching online and buying offline: Understanding the role of channel-, consumer-, and product-related factors in determining webrooming intention. *Journal of Retailing and Consumer Services*. 2021, 58(September 2020).
- Ghalandari K. The Effect of Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions on Acceptance of E-Banking Services in Iran: the Moderating Role of Age and Gender. *Middle-East Journal of Scientific Research*. 2012, 12 (6): 801-807.
- Gounaris, S.P. Trust and commitment influences on customer retention: insights from business-to-business services. *J. Bus. Res.* 2005, 58, 126–140.
- Hair, J., Jr.; Babin, B.; Money, A.; & Samouel, P. *Essentials of Business Research Methods*; Johns Wiley & Sons Inc.:Hoboken, NJ, USA, 2003.
- Hayes, A.F. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*; The Guilford Press: New York, NY, USA, 2013.
- Holahan, C.K.; Sears, R.R.; & Cronbach, L.J. *The Gifted Group in Later Maturity*; Stanford University Press: Palo Alto, CA, USA, 1995.
- Jinsoo Hwanga, Jin-Soo Leeb, & Hyunjoon Kimc. Perceived innovativeness of drone food delivery services and its impacts on attitude and behavioral intentions: The moderating role of gender and age. *International Journal of Hospitality Management*.2019. 81, 94-103.
- Koch, J., Frommeyer, B., & Schewe, G. Online shopping motives during the COVID-19 pandemic—lessons from the crisis. *Sustainability (Switzerland)*, 2020, 12(24), 1–20.
- Lee, H., & Choi, B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems*, 20, 179–228.
- Liu, Z., & Park, S. (2015). What makes a useful online review? Implication for travel product websites. *Tourism Management*, 47, 140–151.
- Manzoor, F.; Wei, L.; Nurunnabi, M.; Subhan, Q.A.; Shah, S.I.A.; Fallatah, S. The Impact of Transformational Leadership on Job Performance and CSR as Mediator in SMEs. *Sustainability*. 2019, 11, 436.
- Mukaka, M.M. A guide to appropriate use of correlation coefficient in medical research. *Malawi Med. J.* 2012, 24, 69–71.
- Nejati M. & Moghaddam P.P., The effect of hedonic and utilitarian values on satisfaction and behavioural intentions for dining in fast-casual restaurants in Iran. *British Food Journal*. 2013,115, 11, 1583-1596.
- Rese, A., Schreiber, S., & Baier, D. (2014). Technology acceptance modeling of augmented reality at the point of sale: Can surveys be replaced by an analysis of online reviews? *Journal of Retailing and Consumer Services*, 21, 869–876.
- Van der Heijden, H.; Verhagen, T.; Creemers, M. Understanding online purchase intentions: Contributions from technology and trust perspectives. *Eur. J. Inf.* 2003, 12, 41–48.