USING ONE-STOP E-COMMERCE PLATFORMS FOR BABY PRODUCT PURCHASES: INSIGHTS ON GENERATION Y IN MALAYSIA

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ABSTRACT

This study focuses on technological and selected psychological factors predicting the use of one-stop e-commerce platforms among Generation Y parents in Malaysia to purchase baby products. These platforms offer great convenience for parents as they can purchase almost anything at any time on one platform. Nevertheless, purchasing baby products is different because parents often prefer to physically inspect baby products and directly interact with the sales representatives for clarifications and assurance. Hence, the decision to use the one-stop e-commerce platforms rely on the parents' confidence of the platforms. Generation Ys, now entering parenthood, has been found to be the largest contributor to the revenue of e-commerce platforms. Therefore, factors predicting their acceptance of the one-stop e-commerce platforms for baby product purchases is important for the platforms. The Technology Acceptance Model was employed in the study, incorporating the two main technology-related factors - perceived usefulness and perceived ease of use - as well as three psychological factors namely trust, perceived risk and perceived benefits in predicting the Gen Ys' adoption of the e-commerce platforms for baby product purchases. Self-administered questionnaire was employed resulting in 200 usable responses from Gen Ys, aged between 26-40. The results indicate that all factors significantly explained Gen Y's decision to use one-stop e-commerce platforms. Perceived usefulness of the one-stop e-commerce platform technology emerged as the most predictive factor and thus should emphasised by operators in fine-tuning their platform. Perceived risk negatively predicts purchases as hypothesized, with concerns on inability to inspect products emerging as the key issue.

Keywords: Technology acceptance model, e-commerce purchasing platform; online shopping; baby products; Generation Y; millennials.

1. INTRODUCTION

Purchasing baby products is a sensitive and involving activity as babies are extremely sensitive and vulnerable. Parents shows extra when purchasing baby products including toys, food, and clothes, to ensure quality, safety, and hygiene for their babies (Mathuthra & Latha, 2016; Pradeep & Arivazhagan, 2021). Purchasing baby products at physical stores allows parents to inspect the products, check the labels and ask the salesperson directly on any concerns. On the other hand, purchasing baby products on onestop e-commerce platforms limit these actions due to the remote nature of the transactions. Although past studies suggest that brand factors such as brand authencity and brand attachment play important roles in influencing consumer purchases (Arya et al., 2018; ,2019, 2021), in the context of one-stop e-commerce platforms there have been many reports of counterfeit and fake brands being sold to unaware customers, particularly in developing countries (Manchanda & Lomo-David, 2021). Therefore, parents must have confidence on the integrity of the one-stop e-commerce platform itself and the participating retailers in the platform in ensuring that the transactions are secure, and the brands are safe, authentic and are of high quality for their babies. Past studies on online baby products purchases have addressed e-commerce website factors (Pradeep & Arivazhagan, 2021), recent sales models of specific baby

product brands (Pandır, et al., 2020) and baby product brand perceptions (Mahuthra & Latha, 2016). There have yet a study to explain the technological factors and psychological factors in predicting the decision to use onestop e-commerce platforms (as opposed to ecommerce platform of baby product brands), Taobao.com, Lazada.com as Shopee.com, for baby product purchases among Generation Ys. In this present study, one-stop e-commerce platform refers to intermediary platforms that connect customers and retailers. Generation Ys (Gen Y), or sometimes referred as millennials, are those who were born between the year 1981 and 2000 (Lissitsa & Laor, 2021).

Gen Ys have been postulated to define and shape the direction of the future global industries (See-Yan, 2018). According to a survey, Gen Ys made the highest monthly online purchases averaging at 5.3 times, followed by Gen X at 4.9 times and Baby Boomers at 3.7 times (Berthiaume, 2019). Not only that the Gen Ys dominate the online population, but they are also more familiar with e-commerce transactions than older generations (Muda, Mohd, & Hassan, 2016). They have high purchasing power and strong proclivity for technology; their intense use of online shopping platforms is changing the rules of the retail sectors (Sullivan, 2019).

Nielsen (2015) reported that the growth in the baby food and diapers market has increased significantly across 60 countries and is expected to continue due to the growing middle class, and the increasing female participation in the work force. With many of the Gen Ys entering parenthood, they have now become a lucrative market for baby products. For instance, in 2017 Gen Y constitute 90% of new parents in the US (United States) (Pooja Biraia Jaiswal, 2019). Their spending habits are now shifting towards baby care and family planning categories (Nielsen, 2018). It has been found that 87% of the Gen Y parents purchase baby products online (Christiana, 2017). Gen Y parents show great interest in their children's well-being, and they have the financial capability, digital connection, and the technosavviness to make informed decisions about the best products or services for their children (Nielsen, 2018). Surprisingly, compared with the average household, the Gen Ys are looking less for sales deals (Nielsen, 2018); that is, they choose value over price. Similarly, Agrawal (2018) shows that price emerged as the lowest predictor for Gen Ys intention to shop online. Based on these backgrounds, Gen Ys is a compelling cohort to study given their domination of the baby product market as well as their prominence in the e-commerce platforms. They also have characteristics that distinguish them from other generational cohorts in terms of their behaviours well as as predilections in consumption. Understanding factors predicting their acceptance of the online platform in purchasing baby products will help e-commerce platforms fine-tune their marketing communication efforts in targeting the Gen Ys.

To provide some preliminary insights, this paper investigates factors predicting the Malaysian Gen Ys' decision to use one-stop ecommerce platforms for baby products. In Malaysia, data from United Overseas Bank (Malaysia) Private Limited indicated that for the first six months of 2016, card members between the ages of 26 to 35 have increased their credit card spending by 26% due to their fondness for online shopping (United Overseas Bank, 2016). They spent 1.4 times more on online purchases compared to other generational cohorts (United Overseas Bank, 2016). Chief Executive Officer (CEO) of Lazada Malaysia explained that diapers sold on Lazada accounted for 4%-5% of all diapers sold in Malaysia in 2016 and further grew to 10% in 2018 (J&T Marketing Team, 2020). It is hoped that this study will contribute towards a more nuanced understanding of one-stop e-commerce platforms acceptance in the context of Gen Ys, baby products and from a developing country in the Southeast Asia.

study employs the Technology This Acceptance Model (TAM) as a lens in predicting factors predicting Gen Ys' decision to use one-stop e-commerce platform. Past studies have employed TAM to explain the use of diverse online platforms for diverse types of target groups and usage contexts (e.g., Khan & Magd, 2021; Ngah et al., 2021; Nijhawan & Dahiya, 2020; Panjaitan et al., 2019; Wei et al., 2018). In general, embracing ecommerce platforms relates to the consumers' perceived usefulness of the technology and how easy it is to use the technology (Fedorko

et al., 2018). It requires a certain level of knowledge and skills on the part of the consumers to enable them to navigate the platform effectively and appreciate the usefulness the technology. of Notwithstanding, considering the numerous fraud cases, fake products and proliferation of various e-commerce platforms, the other key consideration in accepting a platform is the consumers' confidence that the platform is trustworthy, not risky and that it offers benefits. Therefore, in addition to the two main variables of TAM - perceived usefulness of technology and perceived ease of use of technology, - three psychological variables namely perceived risk, trust and perceived benefits are included to predict Malaysian Gen Ys' decision in employing e-commerce platforms to purchase baby products.

2. LITERATURE REVIEW

Baby Products and Gen Y Online Consumption

The baby product market is growing rapidly, comprising of various sub-segments including skin care, baby food and toys. It is a sensitive product category as it dedicated to a highly vulnerable group of product users – babies are sensitive and require extra care when it comes to ingredients and product functions (Mahuthra & Latha, 2016; Pradeep & Arivazhagan, 2021). Baby products purchases are also considered as high involvement in that parents want the best for the wellbeing of their babies (Mahuthra & Latha, 2016).

On e-commerce platforms, the baby care market is one of the fastest growing categories compared to other categories including electronics and fashion. For instance, Lazada, a one-stop shopping platform considers baby products as an upcoming trend, with purchases surging in 2018. Lazada has recorded an average growth of 200% for the baby care category and it is expected to grow even further (DKSH Management Ltd, 2018). In fact, 19% of Southeast Asian consumers have purchased baby diapers through the e-commerce platforms, and 17% purchased baby foods (Ruchipha Thakral, 2017).

Despite the growing online market for baby products, there has been a dearth of research that can elucidate consumers' purchase decisions on one-stop e-commerce platforms. Fuentes & Brembeck (2016) focuses on

message framing of baby food in web marketing and illustrated the roles of message framing in appealing to mothers who are striving for ideal parenting. While the experimental study was important in highlighting the sensitive and involving nature of the baby product consumption, it does not explicate purchase decisions on ecommerce platforms.

Pandir and Oktay (2020) offer interesting insights on purchase behaviour of baby products on the e-commerce platform, but they have only focused on subscription-based platforms of specific baby product brands. Their focus was on understanding the attitude and intention of mothers towards subscription models in those platforms. Pradeep and Arivazaghan's (2021) study is highly relevant to this present study as it explains factors that influence online purchase intention of baby products. Through an exploratory factor analysis, two factors emerged in relation to online purchase intention namely website design factors and trust. Both were found to be significant in online purchase intention. Although the study did not focus on one-stop e-commerce platform or on Gen Ys, it provides compelling support in investigating technological factors and confidence factors that are proposed in this present study. Therefore, this present study extends Pradeep and Arivazaghan's (2021) study by applying TAM as the research framework, and incorporating trust, perceived risks, and benefits as factors to explain consumers' confidence on the one-stop e-commerce platforms that they use.

Gen Y parents have been found to buy more baby care products than the norm (Nielsen, 2018). Dubbed as generation of researchers (Nielsen, 2018), Gen Ys tend to do a lot of fact finding to find the best value for the products that they purchase and are more inclined to trust friends and the social media (Nielsen, 2018). Benefits of one-stop e-commerce platforms such as convenience are significant as they meet the lifestyle and requirements of the Gen Y consumers, whereby two out of three parents mentioned that they try to compress as much as they could into their daily routine (Global web index, 2017).

Gen Ys feel at ease with technology and mobile usage and thus are consumers that e-commerce businesses should target (Prasad et al., 2019). According to the report in Salesfloor (2020), 90% of Gen Ys search the internet for the product reviews and most will be influenced by the reviews in deciding on product purchases. Furthermore, the same report indicates that 68% of the Gen Y consumers agree that social media postings have strong influencing power while 84% stated that the content online has some influence on what they want purchase.

Growing up in the internet era, Gen Ys have a strong understanding of the risks but nevertheless trust online retailers and use ecommerce platforms to fulfil utilitarian motives (Agrawal, 2018). It is also argued that their tendency to conduct a lot of research in their purchases, makes Gen Ys more confident to purchase baby products online even though it is considered a sensitive product category and highly involving purchase activity.

3. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Technology Acceptance Model

The Technology Acceptance Model (TAM) has been widely used in research to predict individual's acceptance of information technology including those pertaining to ecommerce (e.g., Alzubi et al., 2018; Fedorko et al., 2018; Koksalmis, & Gozudok, 2021). TAM is based on the postulation that social behaviour is motivated by the attitude and intention to perform (Davis, 1989).

TAM has two important variables which have impact on behaviour in usage and acceptance of technology – perceived usefulness and perceived ease of use (Davis, 1989). Past studies have included other factors in the TAM model thus extending the model with new variables including perceived risk, trust, social influence, and other variables, depending on the context of the research.

4. Perceived usefulness

According to Davis (1989), perceived usefulness refers to the "degree to which a person believes that using a particular system would enhance his or her job performance". Users must believe that their performance will improve by using technology. In the ecommerce platform context, perceived

usefulness refers to the degree to which a consumer believes that the platform will increase their purchasing effectiveness in the sense of time consumption and convenience (Thắng & Hương, 2017). One-stop e-commerce platforms is useful when it comes to doing pre-purchase research as it allows consumers to check reviews on products, compare prices and products and get more information from the retailers when shopping for baby products. Research shows that Gen Ys are more likely to conduct online research than the general population, and more likely to check user reviews rather than checking with families or friends (Nielsen, 2018). Therefore, in the light of conducive technology offered on one-stop e-commerce platform, the following hypothesis is proposed:

H1: Perceived usefulness of technology positively and significantly influences Gen Ys' decision to use one-stop e-commerce platforms in purchasing baby products

5. Perceived ease of use

The perception towards the perceived ease of use of technology is another main variable in the Technology Acceptance Model (TAM). According to Davis (1989), perceived ease of use refers to situations where the application is easy to use without much effort. It refers to the extent to which a consumer believes that online shopping will be free of effort.

In studying user experience on e-commerce websites, Fedorko et al. (2018) found that there was a greater likelihood that consumers would utilise a website when they feel that the website was easy to use. Perceived ease of use has been found to be predictive of online shopping behaviour in both older adults (Wu & Song, 2021) and Gen Z (Ngah et al., 2021; Habeeb et al., 2021).

In the context of Gen Y, a study by Agrawal (2022) suggests that Gen Y is highly driven by ease of information search on attributes of competing products. With the technology at their fingertips, the digital native Gen Y parents are highly adept at using the e-commerce platforms (Swanzen, 2018). Based on these premises, the following hypothesis is proposed:

H2: Perceived ease of use of technology positively and significantly influences Gen Ys'

decision to use one-stop e-commerce platforms in purchasing baby products

6. Trust

Trust is crucial in the e-commerce platforms due to the limited face-to-face or physical interaction between shopper and seller (Ha & Nguyen, 2019). Hsu et al. (2014) explained that there are four types of trust which are trust on the website, trust in the online merchants, trust in the group members who provide them with information and reviews, and the trust in the intention of the whole transaction. Indeed, trust has been found to influence e-commerce platforms adoption in diverse contexts including smart healthcare system (Liu & Tao, 2022), mobile banking (Ha & Nguyen, 2019) and online food delivery services (Troise, et al., 2020).

Importantly, a study has found that trust is crucial in intermediary platforms such as in the case of one-stop e-commerce platforms because the trust in the intermediary platform translates into the trust on the sellers (Lee et al., 2018). On the other side, distrust in the intermediary negatively influences purchase intention (Lee et al., 2018). Muda et al., (2016) has found perceived trust to influence online shopping intention positively and significantly among Gen Ys. In this present study, trust is especially critical in buying baby products. As such, the following hypothesis is proposed:

H3: Trust positively and significantly influences Gen Ys' decision to use one-stop ecommerce platforms in purchasing baby products

7. Perceived Benefits

In the context of online platforms, perceived benefits refer to what consumers expect to gain from utilising the platform and how it will meet their needs (Ryu & Park, 2020; Yew & Kamarulzaman, 2020). Various studies have significant established links between perceived benefits and e-commerce platform adoption. Ryu & Park (2020) found that perceived benefits significantly consumers' commitment to use social media for shopping. Yew and Kamarulzaman (2020) found that perceived benefits motivate online shopping. Perceived benefits can be divided into functional and non-functional motives (Liu et al., 2013).

Convenience, product variation and quality of products are categorized under functional motives whereas anything related to social and emotional needs are considered or classified as non-functional motives ((Liu et al., 2013). Shopping convenience is an important dimension in perceived benefits because consumers that choose to shop online are actively seeking convenience (Forsythe et 2006). Gen Y parents prioritise convenience, especially when both parents are working (Patro, 2019). In the context of the present study, the following hypothesis is proposed:

H4: Perceived benefits positively and significantly influences Gen Ys' decision to use one-stop e-commerce platforms in purchasing baby products

8. Perceived Risk

Perceived risk refers to consumer's perceptions of the ambiguity and the potential unwanted consequences of purchasing a product or service (Ariffin et al., 2020; Park et. al, 2019). Chen and Barnes (2007) explained that perceived risk can be categorised into two types of risk, security risk and privacy risk.

For online platforms, perceived risks are elements that decreases the consumer's intent to engage with the e-commerce platform especially for online transactions that involve credit cards, mobile transactions, and personal information. Vezir Oguz (2018), found that consumers reject the motive of shopping online because they are in fear of potential risks such as the quality of the product, the reliability of the merchants, the confidentiality of their credit card information or even the delivery charges. Online privacy has been identified to be of a great concern among young adults (Sissodia & Aggarwal, 2021).

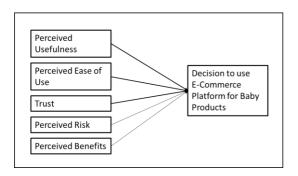
Ariffin et. al (2020) found that security risk is the most significant factor in deterring online shopping. Perceived technology usage risk has been found to be critical in services that are sensitive in nature, such as in online doctor consultation (Goyal et al., 2021). Importantly, Melovic et al. (2021) found that perceived risk and barriers have the strongest impact on Gen Ys online shopping behaviour. Baby products are categorised as high-involvement products and therefore perceived risk can be regarded as a key driver (Pandir et al., 2020). Risks in

baby product purchases can be associated not only with the functional risks but also with symbolic risks such as being perceived as unfit parents if good choices were not made (Fuentes & Brembeck, 2016). Therefore, the following hypothesis is offered:

H4: Perceived risks negatively and significantly influences Gen Ys' decision to use one-stop e-commerce platforms in purchasing baby products

Figure 1.0 presents the conceptual framework for this study indicating the relationships between the dependent variable, decision to use one-stop e-commerce platforms for baby products, and five independent variables, namely between perceived ease of use, perceived usefulness, trust, perceived benefits, and perceived risk.

Figure 1.0 Conceptual Framework



9. METHODOLOGY

Participants

The population of interest in this study is the Malaysian Gen Ys. Purposive sampling was employed to choose respondents who have been using one-stop e-commerce to purchase baby products among Gen Ys who were between 24-39 at the time of data collection. A filter question was used in the questionnaire to identify the suitable participants.

Questionnaire development

The questionnaire for this study was developed based on similar previous studies (Arora & Aggarwal, 2018; Davis, 1989; Gefen et al., 2003; Moshrefjavadi et al., 2012).

The questionnaire consisted of Section A (Participants' profile and the filter question), Section B (Technological and Psychological factors) and Section C (decision to use one-stop e-commerce platform). Section B and C were assessed on a 5-point Likert Scale ranging from 1 strongly disagree to 5 strongly

agree. A pilot test was conducted involving 30 participants of the same population used in this study. A reliability test using Cronbach's alpha revealed that the value of all the variables were above 0.7, thus confirming the reliability of the instrument. No negative feedback was received from the participants in the pilot test.

Data collection procedure

An online questionnaire was developed and distributed through online platforms. The questionnaire was written in English. Participants were informed of the intention of the study and that participation is entirely voluntary and will be kept confidential. Data were collected within a span of three weeks in November 2020. A total of 200 completed questionnaires were returned. The subsequent data analyses were conducted using a series of descriptive analyses and multiple regression in testing the hypotheses.

RESULTS AND FINDINGS Profile of respondents

As shown in Table 1, 25% of the participants were male 75% were female. The participants were categorised into three age groups with the most being 31-35 years old (49%), followed by 26-30 years old (31%), and 36-40 years old (20%); therefore, most of the participants are in the mid-range within the Gen Y population.

The frequency of online shopping for baby products can be categorized into few subsegments. The majority of the respondents, 47%, mentioned that they shop at least once a month and 36.5% of the respondents shop less than once a month. Additionally, 4.5% of the respondents mentioned that they shop at least once a week whereas 12% shop at least once every 2 weeks. The results indicate that Gen Y consumers are frequent online users, mostly purchasing at least once a month on online shopping platforms.

The majority of the respondents (69.5%) stated that they shop baby products online through Lazada platform whereas 55.5% shopped in Shopee. Only 7% of the respondents shopped in 11Street and 15% respondents shopped at Taobao. The minority, 0.5% and 1.5% of respondents shopped in AliExpress and other e-commerce platforms, respectively.

Table 1 Profile of Respondents

Variables	Frequency	Percentage (%)
Gender		
Female	150	75.0
Male	50	25.0
Race		
Malay	61	30.5
Chinese	112	56.0
Indian	27	13.5
Age		
26-30	62	31.0
31-35	98	49.0
36-40	40	20.0
Frequency of online shopping		
Once a week	9	4.5
Once every 2 weeks	24	12.0
Once a month	94	47.0
Less than once a month	73	36.5
Online Platform		
Lazada	139	69.5
Shopee	111	55.5
11Streets	14	7.0
Taobao	30	15.0
Ali express	1	0.5
Others	3	1.5

Reliability analysis and Descriptive Analysis
Table 2 presents the reliability and descriptive
analyses for the factors that are predicted to
influence decisions to use the one-stop ecommerce platform for purchasing baby
products. The reliability analyses for all the

constructs show Cronbach's alpha values ranged from 0.705 to 0.884, demonstrating that all the constructs were internally consistent and had acceptable reliability values.

Table 2 Descriptive Analysis

Constructs		Standar	Cronbac
		d	h's
Constructs		Deviatio	Alpha
		n	
Perceived Usefulness of Technology	4.34	0.453	0.705
The internet improves my performance	4.14	0.721	
The internet makes it easier to search for and purchase	4.01	0.786	
The internet enhances my effectiveness in searching and purchasing	4.17	0.777	
Using the internet to acquire baby product allows me to do my	4.13	0.739	
shopping more quickly			
The internet increases my productivity when searching for and	4.19	0.817	
purchasing baby products			
Perceived Ease of Use of Technology		0.544	0.708
The process of buying baby products online is clear and easy to	4.10	0.702	
understand.			
The internet is easy to use in shopping for baby products		0.768	
It was easy for me to become skilful in using the internet to buy baby		0.634	
products			

Trust	4.15	0.503	0.847
I trust the information provided by the online website(s) that I use to	4.00	0.805	
purchase baby products			
Promises made by online merchants are likely to be reliable	4.05	0.807	
The baby products I received matched the description on the website	4.25	0.663	
The delivery service of my online baby products purchases matched	4.19	0.719	
the description on the website			
I expect the online baby products merchants are well intentioned	4.04	0.732	
I expect that online baby products merchants put customer's interests	4.00	0.754	
before their own			
The website I used to purchase baby products shows a high level of	4.11	0.707	
professionalism in their transactions			
The website I used to purchase baby products is fair in its use of	4.10	0.706	
private user data during transaction			
Overall, the website I used to purchase baby products is worthy of	4.19	0.653	
trust			
Perceived Risk	4.01	0.497	0.884
I feel that my credit card details may be compromised and misused if I	3.90	0.829	
shop online to purchase baby products			
I am concerned that baby products from e-commerce websites offering	3.94	0.863	
cheaper prices are probably nearing their expiry date			
It is hard to judge the quality baby products over the internet	4.17	0.703	
I sometimes fear that I might not receive the baby products that I	3.99	0.805	
ordered online			
I am concerned that I cannot get to examine the baby products when I	4.26	0.667	
shop online			
Perceived Benefits	4.26	0.491	0.710
I get broader selection of baby products while shopping online	4.14	0.685	
I can get good baby products information online	4.01	0.773	
I can shop baby products whenever I want when I shop online	4.24	0.642	
Baby products that are offered online are of high quality	4.08	0.743	
	4.28	0.659	
Purchasing online allows me to get baby products at a cheaper price			
Decisions of Use of One-stop E-Commerce Platform	3.80	0.63	0.805
Many of my baby product purchases are through one-stop ecommerce	3.66	0.774	
platforms			
I prefer purchasing baby products on one-stop e-commerce platforms	3.67	0.840	
rather than traditional stores	4.05		
I prefer purchasing baby products on e-commerce platfoms		0.721	
I consider one-stop ecommerce platforms first when purchasing baby	3.81	0.847	
products			

Among the factors, respondents rated Perceived Usefulness of technology (PU) the highest, followed by Perceived Ease of Use of technology (PEU), Perceived Benefits (PB), Trust (T) and Perceived Risk (PR). For the respondents, technology has been most useful in increasing their productivity in their product search process. They believed that they have become skilful in using the internet to buy baby products with the ease of use of

technology. The results also show that respondents want to take advantage of the benefits of the online platform, especially when it comes to pricing as they believe it is cheaper than the pricing in brick-and-mortar outlets. Furthermore, the results indicate that many of the respondents trust the online websites with only few who are unsure and have a low level of trust. Of all the indicators, perceived risk recorded the lowest level of

agreement. The respondents are most concerned about not being able to examine the baby products. However, the level of concern over misuse of their credit card details is low.

Testing of hypotheses

Table 3 presents the outcome of the regression analysis performed to test the relationships between the five factors that were predicted to influence the Gen Y parents in purchasing baby products online. The model indicates the Adjusted R^2 =.656 and p<0.000. It has been suggested that for research focusing on marketing issues, R2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can, as a rough rule of thumb, be respectively described as substantial, moderate, or weak (Hair et al. 2011; Henseler et al. 2009; Sarstedt, 2017). For this study, the results are considered moderate, with the five independent variables (perceived usefulness of technology, perceived ease of use of technology, trust, perceived risk, and perceived benefits) explaining 65.6% of the variations in the dependent variable.

baby products. H2 is **supported**. Based on the results, the path coefficient value was 0.160 and t=4.084 (p<0.001). The path coefficient has shown that the perceived ease of use of technology positively and significantly influence Gen Y online purchasing decision on baby products.

Next, H3 predicted that Trust positively and significantly influences online purchasing decision on baby products. H3 is **supported**, with path coefficient 0.118, t= 3.454 (p<0.001).

H4 predicted that Perceived Risk negatively and significantly influences online purchasing decision on baby products. H4 is **supported** with a path coefficient value of -0.336 and t=-6.364 (*p*<0.001). Perceived risks such as credit card being misused, inability to check the quality of the products and risk on the retailer's fraud have been a concern for the Gen Y consumers; these concerns are supported in this study.

Table 3 Summary of the Multiple Linear Regression

		В	t	р	r	
Perceived		0.351	6.753	.000	.796	
Usefulness of						
Technology						
Perceived Ease of		0.160	4.084	.000	.700	
Use of Technology						
Trust		0.118	3.454	.000	.560	
Perceived Risk		-0.336	-6.364	.001	788	
Perceived Benefits		0.169	4.370	.000	.694	
R ²	0.7056					
Adjusted R ²	0.656					
F	43.521					
Sig.	.000					

N= 200 *p<.05, **p< .000

Dependent: Gen Y use of e-commerce for purchasing baby products

H1 predicted that perceived usefulness of technology positively and significantly influences Gen Y online purchasing decision of baby products. H1 is **supported** as the result shows a positive and significant relationship with a path coefficient value of 0.351 and t= 6.753 (p<0.001).

H2 predicted that Perceived Ease of Use of Technology positively and significantly influence Gen Y online purchasing decision on

Finally, *H5* predicted Perceived Benefits positively and significantly influences Gen Y online purchasing decision on baby products. H5 is **supported** with a path coefficient value of 0.169 and t=4.370 (*p*<0.001). The results have illustrated that convenience, variety of choices, better quality and cheaper prices do play significant roles in influencing Gen Y consumers in purchasing baby products online.

9. DISCUSSION AND CONCLUSION

One-stop e-commerce platforms are becoming increasingly popular and are evolving to meet

the changing needs of the consumers. For Gen Ys, the one-stop e-commerce platforms have become synonymous with shopping and ubiquitous in the life of many Gen Ys. Importantly, the Gen Ys are driving the growth in online shopping (Nielsen, 2018; Jain et al., 2021, Islam et al., 2020). As they enter parenthood, it has been noted that their habits are shifting, spending more on baby care and family planning categories (Nielsen, 2018). They have been found to spend more than previous generations on easy and convenient products for families (Nielsen, 2018). With one-stop e-commerce platforms emerging today, it is important to understand the Gen Y decision on using the one-stop ecommerce platforms especially for baby products and to know which is the most influencing factor towards their usage.

In the present study, the findings suggest that Malaysians Gen Ys prefer to shop on the Lazada.com platform, followed closely by Shopee.com. Both Lazada.com and Shopee.com are two of the Southeast Asian's biggest one-stop e-commerce (Easy2Digital.com, 2022). In relation to the concerns over the issue of trust and risk as indicated in the findings of this study, Shopee.com provides a Shopee guarantee that protects customers from fraudulent and fake or defective items while Lazada provides Lazada Payment Protection that protect and covers customers from unauthorized transactions.

In the study, 47% of the participants indicated that they shop online at least once a month for baby products, followed by 36.5% who shopped less than once a month, 12% shopped at least once every 2 weeks and lastly, 4.5% purchased baby products at least once a week. These numbers are reflective of a global survey in 2016, whereby it was found that 60% of all consumers are buying online monthly or more frequently, and as for the Malaysian market, 48% of the consumers purchase online at least once a month (Eugene Halingam, 2016).

Notwithstanding, a closer look on the Gen Ys decision to use e-commerce platforms for the purchase of baby products suggest that they are not highly enthusiastic in using the platform, with their rating charting only at mean of 3.80 on the Likert Scale. This

hesitancy could stem from parents' concerns over the risk of purchasing over the ecommerce platform which is evident from the negative relationship that was found between perceived risks and decision to use ecommerce platforms for baby product purchases.

Theoretical Implications

Although previous studies provide mixed results about the impact of perceived usefulness of technology on the online shopping decision, the present study confirms the importance of this factor in terms of online shopping especially in relation to Gen Y and baby products. The findings suggest that Gen Y consumers think that the usefulness of technology on the one-stop e-commerce platforms play a significant role and is the most predictive factor on their decision to use the one-stop e-commerce platform purchasing baby products. They find that the e-commerce platforms help them in their search and purchase of products and allow them to do their shopping quickly.

The findings also show that that Gen Y consumers feel that the ease of using internet can improve their online purchasing process. Gen Ys, recognized as digital natives, are adept at moving effortlessly within and across these e-commerce platforms (Nielsen, 2018). As such, they find it easy to understand the technology on the platform and to skilful in using the platform to buy baby products. As shown in a study by Hanjaya, Kenny and Gunawan (2019), the ease of usage of technology give the best online shopping experience and significantly influence the purchase intention.

Next, trust was found to positively and significantly influence the decision to use the e-commerce platforms in purchasing baby products. Trust is imperative as it helps customers overcome perceptions uncertainty and risk and engage in trustrelated behaviours with the e-commerce platforms such as the sharing of personal information and revealing credit information. With the advancement of technology, consumers can purchase and transact through online systems with relative ease, making it an increasingly familiar part of the shopping experience for many consumers. Thus, customers' involvements in online

purchasing have become an increasingly important trend with trust becoming less of an issue.

Based on the results, as predicted perceived risk was found to negatively influence the decision to use the e-commerce platforms to purchase baby products. According to Weeger et al. (2018), privacy risk, security risk and safety risk are the recent phenomenon of concern for consumers and other stakeholders. However, the advancement of technology can minimize the risks that might be faced by the consumers during online purchasing. The findings in this study, however, showed that Gen Y consumers are more concerned with the inability to examine the baby products when they shop online. In line with the study by Arjun Gupta et al. (2013), online shopping does not give consumers the opportunity to touch and handle the goods. Consumers are unable to physically examine the products, yet many consumers do purchase online because they did their research in local retail stores then purchased online for lower price and delivery.

The independent variable perceived benefits showed a positive and significant influence towards Gen Y online purchasing decision for baby products. Chakraborty (2017) found that the reasonable cost of the product is the most important factor affecting the consumer purchase decision at the time of online shopping. Similarly, in this study, the Gen Y consumers were found to be particularly interested in getting a decent price online. As parents become more knowledgeable, they will seek new products, follow trends, and explore cheaper prices before purchasing the products. Additionally, online shopping offers busy parents extendable shopping hours and a wider assortment of products which creates convenience for them (Ruchipha Thakral, 2017).

Practical Implications

There are several practical implications that can be deduced based on the findings of this study. Firstly, this study offers the ecommerce industry preliminary insights on factors contributing towards Gen Y's decision to use the one-stop e-commerce platforms such as Lazada.com and Shopee.com. With these insights, e-commerce platforms could plan for specific actions and apply to plan the

appropriate techniques online in targeting the Gen Y parents. In terms of perceived ease of use, online retailers or marketers can design websites that are more user-friendly, allowing the consumer to search, shop and process payment in the easiest viable way. As for the perceived usefulness of technology, marketers and retailers need to ensure that the website is organized in a sophisticated manner, with integrated search engines and comparison tools to support consumer in finding their best solution in a timely manner.

To encourage consumer online shopping decisions, retailers and marketers need to minimize the consumer's perceived risk. For instance, the results of this study show that respondents are more concerned when they are unable to examine the quality of the baby products if they were to purchase online. Therefore, marketers or retailers can overcome the concern of the consumers by offering a 14day return policy if they are unsatisfied with the baby products that they have purchased. Xu et al. (2015) stated in their study on Alibaba.com that business managers should consider perceived risk as equally important as other factors that affect consumers' online purchasing decision. Besides having a return policy, marketers can offer an e-wallet payment option to reduce the perceived risk that consumers will be facing. In terms of trust, marketers and retailers can consider improving the relationship between customers through social channels, forums, or directly through the site or the "reviews and comments" section. Consumers can view the "reviews and comments" section to know more about the products. This will build trust in the quality of the products as the section is open to those consumers who have purchased the products before.

Social implications

Studying the Gen Ys in the context of their use of e-commerce platforms and as they enter parenthood provides critical insights on a generation that has been widely recognised as digital natives. As expected, the generation is at ease in using the technology on the e-commerce platform for purchasing baby products and find the technology useful. The findings suggest that for Gen Ys, the one-stop e-commerce platforms is their first stop when doing research on baby products. They are adept at reading online reviews and search for

information, and as shown in a Nielsen (2018) study, they are more likely to trust people online than friends and families. However, when it comes to risk, Gen Ys as parents, are more concern about not being able to evaluate the quality of the products for their babies than on security and privacy issues. This has likely contributed to the slight hesitancy in using the one-stop e-commerce platforms for the purchase of their baby products.

10. FUTURE SCOPE AND LIMITATION

This study has been undertaken in the hope of providing some preliminary insights on the decision to use one-stop e-commerce to purchase baby products among the Gen Ys in Malaysia. The findings in the study suggest that while Gen Y parents are in general comfortable in using the one-stop e-commerce platforms for baby product purchases, their perception is that the platform bears a certain level of risks. The remote nature of the transactions does not allow them to check on the quality of the baby products. Brand trust, brand loyalty and brand equity may likely play important roles, but the present study was limited in scope in that the brand factors were not included in the study. As such, it is suggested that future research include brand factors in relation to the one stop e-commerce platforms itself, as well as the brands of the baby products.

The present study is also limited in scope in that it only investigated one-stop e-commerce platforms. Compared to the one-stop e-commerce platforms of specific baby product brands may offer more assurance in the purchases of baby products. Therefore, it is suggested that future research investigate Gen Ys preference in using one-stop e-commerce platforms in comparison with the e-commerce platform of specific baby product brands.

The study has focused on the two main factors in the Technology Acceptance Model, namely perceived usefulness, and perceived ease of use of technology in investigating factors contributing to the decision to use the onestop e-commerce platforms. While the model has been helpful in providing some preliminary insights, it is limited in that it precludes other consumer and environmental factors. As such it is suggested that future research include factors derived from other

theories such as the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2016) and the Theory of Planned Behaviour (Ajzen, 2020). These lenses will help to include more comprehensive variables such as income, social norms and educational background that may provide more extensive understanding of the phenomena.

REFERENCES

- Alzubi, M. M., Al-Dubai, M. M., & Farea, M. M. (2018). Using the technology acceptance model in understanding citizens' behavioural intention to use m-marketing among Jordanian citizen. *Journal of Business and Retail Management Research*, 12(2).
- Agrawal, D. K. (2022). Determining behavioural differences of Y and Z generational cohorts in online shopping. *International Journal of Retail & Distribution Management*. Ahead of Print, 1-16.
- Ajzen, I. (2020). The theory of planned behavior: frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314-324.
- 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*. 12(3), 309-327.
- Arjun Gupta, Rohit Bansal, Atul Bansal. (2013). Online Shopping: A Shining Future. *International Journal of Techno-Management Research*, 1(1), 1-10.
- 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.
- Arya, V., Verma, H., Sethi, D., & Agarwal, R. (2018). Brand authenticity and brand attachment: how online communities built on social networking vehicles moderate the consumers' brand attachment. *IIM Kozhikode Society & Management Review*, 8(2), 87-103.
- Arya, V., Sethi, D., & Paul, J. (2019). Does digital footprint act as a digital asset? – Enhancing brand experience through

- remarketing. *International Journal of Information Management*, 49, 142–156. https://doi.org/10.1016/j.ijinfomgt.2019.0 3.013
- Arya, V., Paul, J., & Sethi, D. (2021). Like it or not! Brand communication on social networking sites triggers consumerbased brand equity. *International Journal of Consumer Studies*. https://doi.org/10.1111/ijcs.12763
- Berthiaume, D. (2019, December 7). Survey: consumers prefer the same online retailers across generations. https://chainstoreage.com/technology/survey-consumers-prefer-the-same-online-retailers-across-generations
- Chakraborty, T., & Balakrishnan, J. (2017). Exploratory tendencies in consumer behaviour in online buying across Gen X, Gen Y, and baby boomers. *International Journal of Value Chain Management*, 8(2), 135-150.
- Chen, Y. H., & Barnes, S. (2007). Initial trust and online buyer behaviour. *Industrial Management & Data Systems*. 107(1), 21-36.
- Christiana P. (2017, July 11). What are the attitudes and behaviors of millennial moms? How do they differ from dads their age, and from prior generations? Wonder.

 https://askwonder.com/research/att itudes-behaviors-millennial-moms-differ-dads-age-prior-generations-zjl8m6bd8
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS quarterly, 13(3), 319-340.
- Euromonitor (2020, June). Baby and childspecific products in Malaysia. Euromonitor International. https://www.euromonitor.com/babyand-child-specific-products-inmalaysia/report
- Fedorko, I., Bacik, R., & Gavurova, B. (2018). Technology acceptance model in e-commerce segment. *Management & Marketing*, 13(4), 1242-1256.

- Forsythe, S., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20(2), 55-75.
- Fuentes, M., & Brembeck, H. (2016). Best for baby? Framing weaning practice and motherhood in web-mediated marketing. *Consumption Markets & Culture*, 20(2), 153-175.
- Gefen, Karahanna, & Straub. (2003). Trust and TAM in online shopping: An integrated model. MIS Quarterly, 27(1), 51.
- Globalwebindex (2017, August 3). 2 in 3 parents with young children shopping online via mobile. GWI. https://blog.globalwebindex.com/chart-of-the-day/parents-online-shopping/
- Goyal, S., Chauhan, S., & Gupta, P. (2021). Users' response toward online doctor consultation platforms: SOR approach. *Management Decision*.
- Habeeb, S., Arya, V., & Ahmad, N. (2021). Home-based entrepreneuring for empowerment and sustainability of Muslim women: a study in the Indian context. World Review of Science, Technology and Sustainable Development, 17(4), 334-347.
- Ha, N., & Nguyen, T. (2019). The effect of trust on consumers' online purchase intention: An integration of TAM and TPB. *Management Science Letters*, *9*(9), 1451-1460.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hanjaya, S. M., Kenny, S. K., & Gunawan, S. S. (2019). Understanding factors influencing consumers online purchase intention via mobile app: Perceived ease of use, perceived usefulness, system quality, information quality, and service quality. *Marketing of Scientific and Research Organizations*, 32(2), 175-205.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least

- squares path modeling in international marketing. *Advances in International Marketing*, 20, 277-319.
- Hsu, M., Chuang, L., & Hsu, C. (2014). Understanding online shopping intention: the roles
- of four types of trust and their antecedents. *Internet Research*, 24(3), 332-352.
- Islam, T., Pitafi, A. H., Arya, V., Wang, Y., Akhtar, N., Mubarik, S., & Xiaobei, L. (2020). Panic buying in the COVID-19 pandemic: A multi-country examination. *Journal of Retailing and Consumer Services*, 102357. https://doi.org/10.1016/j.jretconser.2020.102357
- Jain, V. K., Arya, V., & Sharma, P. (2021). Social Media And Sustainable Behavior: A Decision Making Framework Using Interpretive Structural Modeling (ISM), . Journal of Content Community & Communication, 14, 1-13.
- J&T Marketing Team. (2020, July 25). What are the best-selling products on Lazada? (2019). J&T Express. https://www.jtexpress.sg/insights/what-are-the-best-selling-products-on-lazada-2019
- Khan, S. A., & Magd, H. (2021). Empirical examination of MS Teams in conducting webinar: evidence from international online program conducted in Oman. *Journal of Content, Community and Communication,* 14 (December),159-175.
- Koksalmis, G. H., & Gozudok, A. (2021).

 What Impacts E-Commerce
 Acceptance of Generation Z? A
 Modified Technology Acceptance
 Model. In Recent Advances in
 Technology Acceptance Models and
 Theories (pp. 57-77). Springer, Cham.
- Lee, S. J., Ahn, C., Song, K. M., & Ahn, H. (2018). Trust and distrust in e-commerce. *Sustainability*, 10(4), 1015.
- Lissitsa, S., & Laor, T. (2021). Baby Boomers, Generation X and Generation Y: Identifying generational differences in effects of

- personality traits in on-demand radio use. *Technology in Society, 64,* 101526.
- Liu, K., & Tao, D. (2022). The roles of trust, personalization, loss of privacy, and anthropomorphism in public acceptance of smart healthcare services. *Computers in Human Behavior*, 127, 107026.
- Liu, M. T., Brock, J. L., Shi, G. C., Chu, R., & Tseng, T. H. (2013). Perceived benefits, perceived risk, and trust: Influences on consumers' group buying behaviour.
- Asia Pacific Journal of Marketing and Logistics. 25(2), 225-248.
- Manchanda, M., Deb, M., & Lomo-David, E. (2021). Scrutinizing the efficacy of branded apps quality to counter counterfeiting and restore trust in M-Commerce. *Quality Management Journal*, 28(3), 156-174.
- Mathuthra, O., & Latha, K. (2016). Customers attitude towards baby products of Johnson & Johnson and Himalayan products, Coimbatore city. *International Journal of Applied Research*, 2(6), 816-819.
- Melović, B., Šehović, D., Karadžić, V., Dabić, M., & Ćirović, D. (2021). Determinants of Millennials' behavior in online shopping-implications on consumers' satisfaction and e-business development. *Technology in Society*, 65, 101561.
- Moshrefjavadi, M. H., Rezaie Dolatabadi, H., Nourbakhsh, M., Poursaeedi, A., & Asadollahi,
- A. (2012). An analysis of factors affecting on online shopping behavior of consumers. *International Journal of Marketing Studies*, 4(5), 81-98.
- Muda, M., Mohd, R., & Hassan, S. (2016). Online purchase behavior of Generation Y in Malaysia. *Procedia Economics and Finance*, 37, 292-298.
- Nielsen (2015). OH, BABY! Trends in the global baby food and diaper markets. Nielsen.
- https://www.nielsen.com/wpcontent/uploads/sites/3/2019/04/Global

- <u>20Baby20Care20Report20Revised20FINAL</u> <u>-2.pdf</u>
- Nielsen (2018). *Millennials on Millennials*. Nielsen. https://www.nielsen.com/wp-
- content/uploads/sites/3/2019/04/millennial s-on-millennials-shopping-insights-report.pdf
- Nijhawan, G. S., & Dahiya, S. (2020). Role of Covid as a catalyst in increasing adoption of OTTs
- in India: study of evolving consumer consumption patterns and future business
- scope. Journal of Content, Community and Communication, 12 (December) 298-311.
- Pandır, B., Oktay, Y., Boz, H., & Saçkes, E. (2020). Analyzing the buying behavior in baby care products through theory of reasoned action. In *IV. International Applied Social Sciences Congress (C-IASOS20)*. İzmir Kavram Meslek Yüksekokulu.
- Panjaitan, M., Napitupulu, J., Maslan, J., & Normi, S. (2019, November). Examining generation X experiences on using e-commerce: Integrating the technology acceptance model and perceived risks. *Journal of Physics: Conference Series*, 1361 (1), 012029.
- Park, J., Amendah, E., Lee, Y., & Hyun, H. (2019). M- payment service: interplay of perceived risk, benefit, and trust in service adoption. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 29(1), 31-43.
- Patro, C. S. (2019). Influence of perceived benefits and risks on consumers' perceived value in online shopping. *International Journal of Applied Behavioral Economics*, 8(3), 12-36.
- Pooja Biraia Jaiswal. (2019, September 14). The millennial mode of parenting. The Week. https://www.theweek.in/health/cover/2019/09/10/the-millennial-mode-of-parenting.html#:~:text=It%20is%20rather%20parenting%20by,shaping%20the%20future%20of%20parenting

- Pradeep E. & Arivazhagan, R. (2021).

 Analysis of website related factors towards online purchase intention with respect to baby products. *International Journal of Management (IJM)*, 12(3), 706-712.
- Prasad, S., Garg, A., & Prasad, S. (2019). Purchase decision of Generation Y in an online environment. *Marketing Intelligence & Planning*, 37(4), 372-385.
- Ngah, R., Azizan, N. A., Kadir, M. A. B. A., Thuraisamy, R., Mohamad, Z., & Danila, N. (2021). Exploring antecedents of online purchasing behavioral intention of generation z: An integrated model of four theories. *Malaysian Journal of Consumer and Family Economics*, 27, 1-24.
- Ruchipha Thakral. (2017, February 2). Winning over moms: The most sought-after demographic online. EcommerceIQ. https://ecommerceiq.asia/southeast-asia-mom-babies-online/
- Ryu, S., & Park, J. (2020). The effects of benefit-driven commitment on usage of social media for shopping and positive word-of-mouth. *Journal of Retailing and Consumer Services*, 55, 102094.
- Salesfloor (2020, February 27). *How each generation shops*. Salesfloor. https://salesfloor.net/blog/generations-shopping-habits/
- See-Yan, L. (2018, August 25). Millennial moment: Coming of age of the world's big spenders. The Star. https://www.thestar.com.my/business/business-news/2018/08/25/millennial-moment-coming-of-age-of-theworlds-big-spenders
- Sisodia, V., & Aggarwal, P. V. B. (2021). A hierarchical paradigm of factors afftecting understanding of online privacy among young adults. *Journal of Content, Community and Communication*, 13 (June), 95-112.
- Sullivan, N. (2019, November 6). *Asia Pacific futures network (APFN) virtual conference, regenerating Asia* 2050. MyForesight.

- https://www.myforesight.my/millen nials-and-consumerism/
- Swanzen, R. (2018). Facing the generation chasm: the parenting and teaching of generations Y and Z. *International Journal of Child, Youth and Family Studies*, 9(2), 125-150.
- Thắng, H. N., & Hương, N. T. L. (2017). Factors influencing online shopping intention: an extension of the technology acceptance model. *Hue University Journal of Science: Economics and Development*, 126(5B), 47-58.
- Troise, C., O'Driscoll, A., Tani, M., & Prisco, A. (2020). Online food delivery services and behavioural intention—a test of an integrated TAM and TPB framework. *British Food Journal*. 123(2), 664-683.
- United Overseas Bank (2016). UOB Malaysia: Millennials spending more on credit cards as they take their shopping online. UOB. Retrieved from https://www.uob.com.my/about/news/2016/press-release-nov22-2016.html#:~:text=In%20the%20first%20six%20months%20of%202016%2C%20they%20spent%201.4,compared%20with%20other%20age%20groups.&text=The%20volume%20of%20credit%20card,compared%20with%20a%20year%20ago.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2016). Unified theory of acceptance and use of technology: A synthesis and the road ahead. *Journal of the Association for Information Systems*, 17(5), 328-376.

- Vezir OĞUZ, G. (2018). The influence of virtual store atmosphere, online shopping
- satisfaction and perceived risk in online shopping on intention to continue online shopping. *Social Sciences Studies Journal*, 4(17), 1452-1458. doi: 10.26449/SSSI.536
- Weeger, A., Wang, X., Gewald, H., Raisingh ani, M., Sanchez, O., Grant, G., & Pittaya chawan, S. (2018). Determinants of intention to participate in corporate BYOD-programs: The case of digital natives. *Information Systems Frontiers*, 22(1), 203-219. doi:10.1007/s10796-018-9857-4
- Wei, Y., Wang, C., Zhu, S., Xue, H., & Chen, F. (2018). Online purchase intention of fruits: Antecedents in an integrated model based on technology acceptance model and perceived risk theory. *Frontiers in Psychology*, 1521.
- Wu, J., & Song, S. (2021). Older adults' online shopping continuance intentions: Applying the technology acceptance model and the theory of planned behavior. *International Journal of Human–Computer Interaction*, 37(10), 938-948.
- Xu, Y., Chong, T. W., Krilavičius, T., & Man, K. L. (2015). Perceived benefits, risks, and trust on online shopping festival. *Communications in Computer and Information Science*, 225-235.
- Yew, J. L. K., & Kamarulzaman, Y. (2020). Effects of personal factors, perceived benefits, and shopping orientation on online shopping behavior in Malaysia. *International Journal of Economics, Management and Accounting*, 28(2), 327-360.
