

HEALTH CONSCIOUSNESS IS RESPONSIBLE FOR SHIFT IN SHOPPING DESTINATION: AN EXPLORATORY ANALYSIS

**Anil Kashyap, Central University of Himachal Pradesh.
Ajay Kumar, Sharada University**

ABSTRACT

Changes in shopping behavior are witnessed along with the appearance of Covid-19 outbreak. In pandemic, selection of retail destination is determined by number of factors associated with risk and reward. This study explored factors responsible to accelerate online shopping during Covid-19 pandemic. Data for the study were collected from 394 active online shoppers who proactively shopped online during pandemic. Exploratory factor analysis and confirmatory factor analysis (CFA) is used to confirm the number of factors. Six factors; health consciousness, self prevention and precaution, marketing efforts, Government protocol, utilitarian aspects and product availability are extracted in the study. These factors are responsible to prefer e-commerce over traditional retailing during Covid-19 pandemic. The study represents the population for a specific region therefore; inferences drawn from this study may not apply in other countries. This paper adds values by adding distinct factors responsible to determine retail shopping destination especially in stressed situation. Also it strengthens the theory of hybrid channel of distribution and provides inputs to improve the retail offerings.

Keywords: Shopping Behaviour, Online Shopping, Exploratory Factor Analysis, Covid-19 pandemic, Health consciousness

INTRODUCTION

Pandemic is the rarest occurring incident but its impact is intense. It has influenced our established behaviour and practices. The spread of Covid-19 emerged as the mammoth challenge to the existence of human life. Therefore, to encounter this deadly virus, alteration in human behaviour is considered as important as its remedy. Issues related to behavioural change during the Covid-19 pandemic are being extensively researched (Mehta et al., 2020; Pham et al., 2020). Researchers highlighted aspects related to human behaviour in unprecedented situation like a pandemic. Consumer shopping consists of broad elements of behaviour. The effect of covid-19 on shopping and supermarket activities has already been discussed (Anastasiadou et al., 2020). Therefore, exploring shopping behaviour during Covid-19 has merits and relevance.

Online buying in the outbreak of pandemic was motivated by factors which are not discussed in normal circumstances. Health and safety concerns, Covid-19 restrictions, adoption of Covid protocol and availability of products were the prominent reason to buy online. Recently conducted studies concluded that health concerns positively increase the likelihood of ordering online during pandemic and post-pandemic (Unnikrishnan & Figliozzi, 2021). Also, study in the context of Malaysian retail industry by (Naseri et al., 2021) highlighted the challenges of shopping during pandemic and discussed the online shopping activities during Covid-19

outbreak. Therefore, it can be assured that to be safe and to avoid the breach of social distancing or to follow the Covid protocol consumers preferred online shopping during the outbreak.

In the pre-Covid era extensive research studies are conducted to examine the various factors determining the change in consumer shopping behaviour and shift towards online (Dholakia & Uusitalo, 2002; Kim & Park, 2005; Aw, 2019). Change in consumer behaviour during Covid-19 pandemic is addressed in recent research (Zwankaa & Buff, 2021). Further, in the context of online shopping concept of utility, accessibility, convenience, perceived usefulness, perceived price and information is explored and validated in the previous studies. The surge in online grocery shopping indicates that E-commerce was the prominent way to shop during the Covid-19 (Keyes, 2020; Redman, 2019). However, a detailed study is needed to understand the behavioural change during Covid-19 and to find out the factors responsible to determine consumer shift towards online. Therefore, there is an urgent need to explore the factors responsible for the change in consumer shopping behaviour during Covid-19 pandemic.

The aim of this study is to explore factors responsible to accelerate online shopping during Covid-19 pandemic. This study may help physical and online retailers to understand shopping behaviour, consumption pattern and motivation behind shopping in the crisis time like Covid-19 pandemic. Alteration in the business model and appropriate customization as per the incurred circumstances is the need of the hour. In the current scenario hybrid nature of retailing is the formula for survival. This study may help retailers to rationalize their resources which may help them to survive in challenging situations.

LITERATURE REVIEW

Online Shopping Drivers

In literature, it is found that online shopping is mainly driven by perceived benefits (Machado, 2006) which directly or indirectly influences consumer behaviour towards online shopping (Hoque et al., 2015; Al-Debei et al., 2015; Hajli, 2014). While shopping online customers perceived multiple benefits over offline shopping (Arora & Agrawal, 2018; Al-Debei et al., 2015; Kim et al., 2008; Liu et al., 2012). For instance, convenience, price, product varieties and information are some of the benefits over the physical store as discussed in the previous studies (Arora & Agrawal, 2018; Davis et al., 2021). Utilitarian aspects of online shopping (Kumar & Kashyap, 2018) and availability of adequate information on website etc. (Close & Kinney, 2010; Shim et al., 2001) are some other benefits drawn from online shopping. Further, having better deals, delivery service and shopping 24 opening hours are the most influential positive factors for the adoption of online shopping (Pechtl, 2003). Another important aspect of online shopping is discovered by (Xu et al., 2021) stated that online channel increases psychological distance and leads consumers to pay more attention to a product's desirability (feasibility) aspects. The results revealed that (1) social influence, (2) variety seeking, (3) advertising, (4) convenience, (5) trust and (6) product factors are positively related to online user behaviour.

Shopping During the Outbreak of Covid-19

Due to perceived benefits and utility online shopping is considered more useful during the outbreak of Covid-19. In pandemic, customer sought safe and secure shopping as they were worried about health and safety. By using multiple regression analysis, Eger et al. (2021) demonstrated that fear appeal (fears for health and economic fears) are associated with the changes in customer behaviour and influence traditional and online shopping related to Covid-19. They identified fear for health as the main reason for choosing new shopping items. (Guthrie, Fosso-Wamba, & Arnaud, 2021) conducted a study on consumer behaviour during the pandemic. The objective of this study was to understand how consumers use e-commerce to react to, cope with and adapt to periods of environmentally imposed constraints. (Guthrie, Fosso-Wamba, & Arnaud (2021) relied on multiple sources including transaction and search data and highlighted the usefulness of the multi-perspective react-cope-adapt framework of constrained consumer behavior in an online environment. (Beckers, 2021) conducted a study on e-retail accessibility, as the differences between online and physical retail and suggest a revision of the traditional economic geographical perspective on retail performance as introduced by (Christaller, 1933).

Shopping online was primarily motivated by utilitarian benefits and safety concern rather than the conventional benefits like offers and discounts. Other attributes of online shopping including the e-payment option, safe delivery at doorstep and shopping flexibility made it more convenient. The influence of Covid-19 on changing consumer behaviour towards e-shopping is addressed by (Zulauf et al., 2021). Also, how online purchasing behavior evolved during the Covid-19 crisis is addressed by Guthrie et al. (2021). Hashem (2020) found that circumstances of lockdown and quarantine are responsible in the rise of online shopping in Jordan. Also, studies confirmed that during the pandemic outbreak consumers did panic buying through e-commerce (Leung et al., 2021, Barnes et al., 2021; Islam et al., 2021). The cases of panic buying are recorded in Australia, USA, UK, and in Hungary (Andras and Tamas, 2020; Bekiempis, 2020; Carmody, 2020; Wilson, 2020).

The study conducted by (Kulkarni & Barge, 2020) highlighted the probable shift in consumer preferences due to Covid-19 pandemic This shift was pushed by the closure of physical stores, customer preference to reduce the health risk, and also to save time (Ivanovic and Antonijevic 2020). (Dinesh & Raju, 2021) find these reasons equally responsible for the risen in the frequency of online shopping. Rising numbers of coronavirus cases are also responsible in to push online shopping. In a study, Ali (2020) concluded that Iraqi consumers' online shopping rate increased alongside the rise in global and Iraqi Covid-19 cases.

Addressing the multiple reasons Naeem (2020) revealed that vulnerable group of people, fear of illness, fear of empty shelves, fear of price increase and social inclination to buy extra to stay at home, increased panic impulsive buying behaviour among customers. Online shopping catered to this sudden impulsiveness among customers and offered the option of shopping while staying safe at home. Nielsen (2020) in its report stated that due to restrictions and lockdown, a new buying and consumption pattern and behaviour is observed among affected consumers worldwide. This change of behaviour is also observed in the previous studies within the consumer behaviour literature (Kaswengi & Diallo, 2015). And also seen during the pandemic (Sharma & Jhamb, 2020).

The study conducted by Nielson (2020) presented some detail insights about changes in consumer behaviour. In a situation like pandemic, customer sensitivity leads them to buy the product and select stores based on health and safety concerns (Nielsen 2020a, b). Nielsen (2020b) survey on consumer sentiment about the current Covid-19 outbreak, reported that 55 percent of the respondents would take extra precautions when visiting the brick-and-mortar stores. Another study conducted by Blakely (2020) stated that 77 percent of customers were cautious about cleanliness as well as health and safety while shopping. In the pandemic hygiene, health and safety emerged as a serious concern for customers. Leggett (2020) concluded that hygiene, health and safety are thus anticipated as new shopping standards. E-commerce giants widely promoted these standards in their marketing campaigns and took advantage of the local shops. While highlighting the importance of these standards Fine (2020) suggested that it should be included in the communication of retailers to customers.

After the massive promotion of Covid-19 safety measures, the customer became sensitive in their decision-making. They started giving preferences to the products and services which are being delivered with these new standards of hygiene, health and safety. Maintaining these new shopping standards in the pandemic situation was quite difficult for conventional retailers. But to retain customers and to increase loyalty retailers need to adopt these new changes and standards while fulfilling consumer demand (Fahmy & Sohani, 2020). A recent study highlighted that in pandemic situation shopping safety practices mutate consumer buying behaviour (Sehgal et al., 2021).

In the Covid-19 pandemic role of Government in altering consumer behaviour is evenly important. By imposing lockdown and restrictions, Government ensured the closure of the local market. If in case the markets partially opened then customers' movement is regulated while imposing penalties and fines. However, to make sure the supply of essentials and other daily need items to the customers, Government allowed home delivery services to the identified vendors (Dash, 2020). Also, in case of lockdown violation penalties are imposed. It affects consumer behaviour toward online shopping during the pandemic directly and positively (Alhaimer, 2021). At the beginning of Covid-19, delivery services for e-commerce giants were partially halted. Except for the essential items, e-commerce portals did not take orders for other products. Later, when Government allowed home delivery of products, the services are resumed with full capacity. Online shopping then emerged as the best way to shop. It was safe and also does not violate Covid-19 protocol of social distancing and wearing the mask. The rise in demands for products to counter the Covid-19 and lack of its supply in the local market also made e-commerce a preferred choice among the customers (OECD, 2020). The massive demand for online stores is witnessed across the globe during the pandemic. For instance, Amazon's associate Whole foods Markets increased the online order capacity by more than 60 percent due to Covid-19 to meet the surge in demand (as cited by OECD, 2020).

Another breakthrough in the demand for online shopping was created by the marketing campaign and communication. The plenty of advice to fight against coronavirus and communication related to stay healthy and fit during the Covid-19 outbreak helped to create space in customers' mind. E-commerce updated its delivery mechanism by ensuring contactless delivery, sanitization of each consignment and additional safety measures to the delivery personnel. Delivery of essential items was speed up to beat the local competition and also to stay ahead with companions. These small but important marketing efforts helped e-commerce to be the best choice during the panic of Covid-19 outbreak. Study confirmed that price transparency,

service quality and firms' sincerity have significant role in determining shoppers satisfaction (Tata et al., 2021). E-commerce has adopted all three measures to enhance customer satisfaction.

Rajan (2020) in his study rightly said that marketing efforts have a very strong influence on shopping motivation as they received the highest mean compared to all other factors. Albeit, emphasis on marketing innovation during the Covid-19 can be seen in the literature (Ding & Li, 2021). As per Habes et al. (2020), "Information Sharing", "Healthcare Advertising" and "Healthcare Awareness" are the strongest predictors in Digital Media Advertising regarding Covid-19 awareness. Sharma, P. (2021) stated that offering education, sharing information about medical guidelines and Government initiatives during the lockdown strengthened service co-creation process. Digital presence and interactive platform of E-commerce portals helped customers to share and evaluate the information needed for co-creation process. Promotion of hygiene and home delivery was also common, particularly for QSRs and alcohol and food delivery companies (Martino et al., 2021). Based on the critical literature review the following variables/ factors are extracted (see Table 1). Most of them are from the online shopping context.

Construct	In context	Authors
Health consciousness	Tourism	Karn and Swain (2017)
Physical distancing	Online shopping during Covid-19	Sehgal et al. (2021)
Perceived benefits	Online shopping	Forsythe et al. (2006), Al-Debei, Akroush, and Ashouri (2015)
Awareness of marketing policies	Online shopping Covid-19	Pham, et al. (2020)
Awareness of utility	Online shopping during Covid-19	Pham, et al. (2020)
Utilitarian attributes	Online shopping	Moon et al. (2017)
Product availability	Online shopping	Kumar and Kashyap (2018)
Product details	Online shopping	Bucko et al. (2018)
Accessibility	Online shopping	Kumar and Kashyap (2018)
Shopkeepers traits	Online shopping during Covid-19	Sehgal et al. (2021)
Safety measures	Online shopping during Covid-19	Sehgal et al. (2021)
Hygiene practices	Online shopping during Covid-19	Sehgal et al. (2021)
Utilitarian motive	Online shopping	Kumar and Kashyap (2018)

RESEARCH METHODOLOGY

Research Design and Sample Selection Procedure

Covid-19 outbreak and its challenges were equally experienced by all Indian citizens. Therefore, geographical restrictions were not considered important while collecting the final sample. The data were collected from Indian market in the month of April and May, 2021.

Participants in the survey were more or less exposed to online shopping but their frequency of shopping varied. However, it was ensured that respondents had done online shopping in the past one year. Otherwise, also, the study stressed to know about the shopping pattern during the Covid-19 outbreak. It was decided to use convenience sampling to take responses from online shoppers. Since convenient sampling is easy to implement and it is cost-effective too. This sampling design is commonly used in the online survey to study online shopping behaviour (Al-Debei et al., 2015; Rahman et al., 2018; Akhtar et al., 2020; Sehgal et al., 2021). The sample size was determined as per the recommends of Hair et al. (2015). Thus, the appropriate sample size for this study would be $24 \times 10 = 240$, which is achieved ($360 > 240$).

To avoid the wastage of resources and to stay safe during the Covid outbreak Google form was then developed and sent directly to the participants through e-mail. After removing incomplete and repeated responses of the questionnaire, finally 394 valid responses are considered in data analysis.

Survey Instrument

A self-administered questionnaire on Google Form was developed and sent through e-mail and shared on social media (i.e. Facebook and Whats app). The items on health consciousness, safety during Covid-19, product availability, social distancing, Government guidelines, marketing and promotional efforts during the pandemic were extracted from critical literature review (see Table 1). All items were measured on Likert type scale ranging from strongly disagree (1) to strongly agree (5).

Respondent's Profile

Based on information gathered from the survey summarized in Table 1, 55.30 percent of respondents surveyed were male followed by 44.70 percent female. In terms of age group, most of the respondents were young i.e. 54.10 percent in the age group of (21-35) years and 26.40 percent were in age the group of up to 20 years followed by 14.50 percent from the (35-50) years of age group and 5.10 percent were aged of 50 years or above. With regard to family income, more than 50 percent respondents were belonged to a family having income Up to Rs. 25,000 per month or in the range of (Rs. 25,001- Rs. 50,000). Respondents from the other two income groups were 13.10 percent and 5.10 percent having family income to Rs. 50, 001-1,00,000 and Rs.1,00,00 and above respectively. Data related to respondents' education showed that 52.00 percent were post-graduate, followed by 39.10 percent graduate, 6.30 percent High school (10th)/intermediate (10+2) and 2.5 percent doctorate. Most of the respondents are frequent online shoppers. In the matter of family size 50.30 percent respondents belonged to a 2 to 4 members family followed by 42.10 percent from a family of more than 4 members.

		Frequency	Percent
Gender	(i) Male	218	55.3
	(ii) Female	176	44.7
Age	(i) Up to 20	104	26.4
	(ii) 21-35	213	54.1
	(iii) 35-50	57	14.5
	(iv) 50 years & above	20	5.1
Family income (in Rs./month)	(i) Up to 25000	98	24.9
	(ii) 25,001-50,000	126	32
	(iii) 50,001-75,000	52	13.2
	(iv) 75001-100000	24	6.1
	(v) 1,00,000 and above	94	23.9
Education	(i) High School (10th)/Intermediate (10+2)	25	6.3
	(ii) Undergraduate	154	39.1
	(iii) Post-graduate	205	52
	(iv) Doctorate	10	2.5
Shopping frequency	(i) Not So often	42	10.7
	(ii) Rarely	51	12.9
	(iii) Normally	215	54.6
	(iv) Regularly	73	18.5
	(v) Very often	13	3.3
Family size	(i) Single	30	7.6
	(ii) 2-4 members	198	50.3
	(iii) > 4 members	166	42.1

DATA ANALYSIS

Exploratory Factor Analysis (EFA)

Exploratory factor analysis was exploited to explore the number of factors. Before run the EFA, sample adequacy and correlation between the factors and among the variables at significant level was examined. Bartlett's test is used to check the correlation structure among the variable ($=2837.508$, $df = 231$) at 0.05 level of significant (p. 103, Hair et al., 2015). For measure of sample adequacy, the value must be exceeded 0.5 (p. 103, Hair et al., 2015). The sample adequacy is assessed based on KMO coefficient ($= 0.857$).

As per Hair et al., (2015) recommendation, before finalizing the number of factors, researcher should ensure the acceptable factor loading (>0.5), the Eigenvalue of each factor (>1) and total variance extracted of all selected variables which must be greater than 60 percent. This study satisfied the given condition, therefore EFA was found appropriate to run. In this process, six factors are explored. Two items were removed due to loading below stipulated criteria. And item no 23 designed to measure '*product essential in to Covid-19*' shown the cross loading on

factor three and six but finally associated with factor third due to contribution in reliability. The EFA result with items' loading is given in Table 2. And the factors with explained variance, and Cronbach alpha reliability are depicted in Table 3.

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
During Covid-19 I am worried about my health therefore I prefer to shop online than to go out for store shopping	0.804					
Due to Covid-19 outbreak I prefer online shopping as I feel conscious while going out for shopping	0.77					
To stay healthy during Covid-19 I prefer to buy online than to go for frequent shopping	0.756					
I found online shopping more useful than visiting a store during Covid-19 outbreak	0.671					
As a preventive measure in current scenario I prefer online shopping and avoiding in store shopping	0.544					
There is no need to frequent hand wash or to follow protocol while shopping online.		0.81				
“Wearing a face mask” is not required in online shopping		0.771				
“Social Distancing” is not a limitation in Online shopping		0.611				
I can shop online even if I am in quarantine		0.561				
Online retailers ensure safe and secure delivery in Covid-19 outbreak			0.729			
Regular sanitization of product and delivery personnel was ensured			0.715			
Online retailers offered contactless delivery during Covid-19			0.655			
Online retailers provide safe packaging			0.549			
Online retailers allow me to shop round the clock (24*7 hrs) even in Pandemic/Covid-19 outbreak				0.807		
Online retailers help me to get detailed information about the products (use of different types of mask, types of sanitizer etc.)				0.752		
Online shopping helps me to avoid physical interaction while shopping in Covid-19 outbreak				0.678		
Essential Products which help to encounter Covid-19 (e.g. mask, sanitizer and gloves etc.) were delivered on priority			0.498			
Products available on E-commerce are in large varieties than in local store					0.769	
Product prices are clearly stated on online shopping website					0.749	

Online shopping ensures the best deal on different products and save my money					0.684	
Online shopping is the best to shop and follow Covid-19 protocol						0.736
Online shopping helps me follow government's guidelines and Covid-19 protocol						0.662
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization.						

Confirmatory Factor Analysis (CFA)

In this study, confirmatory factor analysis (CFA) is applied to test whether all latent construct are fit or not, and to confirm the concept 'factor influencing shopping behaviour during Covid-19 pandemic'. The overall fitness indices are in the acceptance category ($\chi^2 = 445.013$, $df = 193$, $p = 0.000$, $CMIN/DF = 2.306$, $MR = 0.040$, $GFI = 0.908$, $AGFI = 0.879$, $IFI = 0.907$, $CFI = 0.905$, and $RMSEA = 0.058$). The value reports that the measurement model fits the data reasonably well.

	Cronbach alpha reliability	Composite reliability	Variance explained
(1) Health consciousness	0.804	0.816	13.433
(2) Self prevention and precaution	0.737	0.693	11.467
(3) Marketing effort	0.739	0.752	10.964
(4) Utilitarian aspects	0.717	0.717	8.875
(5) Product availability/ description	0.667	0.718	8.711
(6) Covid Protocol	0.71	0.683	7.839

The reliability and validity of the measurement model are determined. In Table 3, calculated value of composite reliability and Cronbach alpha reliability are represented. The reliability of the constructs is calculated to know the internal consistency. Two types of reliability i.e. composite and Cronbach's alpha reliability are calculated in this study. Cronbach's alpha reliability of the construct is in range from 0.667 to 0.804 indicating the reliability of the measurement scale. The Cronbach alpha reliability should be greater than 0.7 (Nunnally 1987). Further, greater than 0.6 may be consider in exploratory research (p. 123, Hair et al. 2015). The composite reliability became an important measure while using CFA. The constructs' composite reliability are under the accepted level (>0.7) which ranges from 0.683 to 0.816. Only two construct's reliability is close to 0.7 that can be considered see Table 4.

DISCUSSION

The results of exploratory factor analysis extracted six factors, health consciousness, self-prevention and precaution, marketing efforts, utilitarian aspects, product description, and Covid protocol. These factors are termed on the basis of variables loading and the respective statements

within the particular factor. The result of factors validity, reliability, and CFA reported the appropriateness of factors.

Further, EFA results are reported in Table 2. The factor 'health consciousness' is conceptualized on items related to health anxiety during the Covid-19 outbreak. This factor is consistent with the findings of previous studies. In the context of online shopping, Sehgal et al. (2021) termed it as '*health practices*' while (Karn & Swain, 2017) named it '*health consciousness*' in their study on tourism sector. The aptness of the factor lies in the fact that the fear of the spread of coronavirus forced people to avoid any such mean which needs physical exposure. In an unprecedented challenge when health was at stake, customers became conscious and anxious while going out for shopping. Meanwhile, e-commerce looked more promising and closer to the needs of shoppers. The dual characteristic of protection and desire to shop is fulfilled by online shopping.

"Self-prevention and precaution" came out as the second important factor of the study is considered the only mean to avoid the risk of virus. Online shopping viewed as a preventive measure as it does not required stepping out. In crowded Indian market maintaining physical distance is almost impossible. Even when people were aware of the severity of virus it does not give guarantee that they will not violate social distancing norms. Therefore, smart shoppers preferred not to take risk of going out and did shopping online. Sehgal et al. (2021) explored the factor '*safety measures*' similar to this factor.

Self-prevention and precaution stressed on to follow Covid protocol. The factor clearly narrates that even though wearing a mask and frequent hand wash is bitter experience hygiene and cleanliness are maintained by individuals participated in the study. To avoid the encumbrance of masking, frequent hand washing and regular sanitization people preferred online shopping. Online shopping portals are interactive and user-friendly. In a pandemic when consciousness, anxiety and loneliness were common among people, e-commerce addresses these issues through effective communication.

The next factor in the study is "marketing efforts". It is based on the variables drawn from the marketing efforts initiated by the e-commerce giants during Covid-19. While incorporating Covid protocol online retailers ensured the sanitization of product and delivery personnel. Items to encounter Covid-19 such as mask, sanitizer and gloves considered essential and delivered on priority. Donation and social initiatives to support Covid affected people are promoted on e-commerce portals and customers were invited to be the part of it. This helped in building image and developing trust.

Utilitarian aspect emerged as fourth factor in the study which is consistent with previous studies conducted in pre-Covid era. E-retailers offer plentiful information about available products. This information also utilized in making purchase decisions beyond e-commerce (Kumar and Kashyap, 2018). Studies confirmed that availability of adequate information on a website (Close and Kinney, 2010; Shim et al., 2001) helps to convert browsing into buying. E-commerce platforms educate customers while giving information about masks, sanitizer, face shield, gloves, and immunity booster, etc. Customers were seeking detailed information about these products as they lack in experience to use. Also when physical shops were completely closed or barely opened for few hours, E-commerce offered shopping round the clock without violating lockdown norms and with no extra precaution required. It is therefore concluded that e-commerce proved its utility in offering services, information and access.

Availability of product and product description emerged another important attribute of online shopping which came out in accordance with previous research by Bucko et al. (2018) and Nwankwo et al. (2019). Both of these studies find product detail, product image, reviews, and product description as important factors to determine the success of online shopping. Also when physical retailers were struggling to maintain their inventory due to restricted transport movement online retailers leveraged its strong logistics and distribution network and ensured the availability of product which was out of stock in local shops.

The last factor explored in this study is “Covid protocol”. It consists of variables related to guidelines and advisories issued by the Government and health agencies around the World. Covid protocol is meant to avoid the spread of virus and considered a remedial measure therefore restrictions were strictly imposed by the Government officials. To ensure the effectiveness of Covid-19 guidelines provision of punishment such as penalties, fines and even sentence to jail was exercised. To avoid any such trouble people stayed at home. Also, the sense of responsible citizen motivated them to follow Covid-19 protocol; online shopping strengthens their wish to do so.

CONCLUSION

While addressing the shift in shopping behaviour during the outbreak of Covid-19, this study extracted six factors termed as health consciousness, self-prevention and precaution, marketing efforts, utilitarian aspects, product availability & description and Government protocol. Each factor has distinct nature and characteristics make the study insightful to understand shopping behaviour in the pandemic. Further, the study contributes theoretically by adding some new factors responsible for the change in shopping behaviour. The fear of Covid-19 raised health consciousness among people, while restrictions imposed prohibited them to move freely and shop. Under these circumstances, online shopping emerged as a smart way to shop. This study investigated customer desire and compulsion during the Covid-19 outbreak and addressed the role of e-commerce to resolve the same.

Study advocates the potential and growth of digital business and digital communication during Covid-19 and warns traditional retailers about these changes. Future of retailing will be backed by technology and it has little space of small traditional retailers.

IMPLICATIONS

Based on results, this study suggests multiple implications for marketers and retailers. Use of technology or digital presence of business emerged as the crucial business mantras during the pandemic. Conventional retailers and managers should bring out technological interface in retail practices. Covid protocol and restrictions affected the business of small retailers unable to serve the market in suddenly occurred circumstances. Technology and collaboration may bring flexibility in retail operations. Small retailers may join the intermediary portals or initiate the partnership with e-commerce giants to enhance the reach of retailing.

Availability of Information emerged as a key differentiator between online and traditional retailers. But to present information in the era of mobile telephony is equally challenging. Findings of the study reveal that serving customers in the unprecedented challenges of Covid-19 strengthen customer relationships and trust. Therefore, marketers may learn to prioritise

customer preferences. Addressing customer concerns about health, safety and limitations to go out, online retailers offered contactless delivery, sanitization of products and ensured safe delivery. Further, the study provides the lessons about how to respond in the crisis situations. E-commerce giants took a lead to understand customer psyche and ensured the doorstep delivery to customers who were in home isolation or in quarantine.

Marketing communication in retail is gaining momentum. E-retailers are using a wide array of marketing communication to lead in the multifarious retail competition. Creating effective communication strategies, leveraging the advantage of digital presence, and strong distribution and supply network helped e-retailer to emerge as the best retail destination. Marketers, retailers and other stakeholders may draw inferences that neither all e-commerce giants enched the opportunities nor all traditional retailers failed to serve the market. It is always depends upon how you forecast and responds in market. In an extraordinarily challenging time e-commerce addressed customers' concerns of health and safety which make its presence stronger than before. The relationship established in the tough time of Covid-19 will be rewarded by the customers; they may continue the change in shopping destination even in the new normal.

LIMITATION AND FUTURE RESEARCH

It is acknowledged that this study has some limitations. First, the respondents belonged to a specific territory. The impact of Covid-19 and the produced circumstances varied across the World, the inferences drawn from this study may not apply in other countries. Although the outbreak of coronavirus affected customer shopping behaviour across the World, sample survey from other geographical areas may consider in future research studies. Another limitation is the number of factors explored in this study. Other unexplored factors influencing consumer shopping behaviour in the current pandemic may also be examined. Last but not least, causal research may be conducted to measure the impact of revealed factors on outcome variables such as attitude, satisfaction, repurchased intention etc. .

REFERENCES

- Al-Debei, M. M., Akroush, M. N., & Ashouri, M. I. (2015). Consumer attitudes towards online shopping: The effects of trust, perceived benefits, and perceived web quality. *Internet Research*, 25(5), 707-733.
- Alhaimer, R. (2022). Fluctuating attitudes and behaviors of customers toward online shopping in times of emergency: The case of Kuwait during the COVID-19 pandemic. *Journal of Internet Commerce*, 21(1), 26-50.
- Ali BJ. Impact of COVID-19 on consumer buying behavior toward online shopping in Iraq. Ali, BJ (2020). Impact of COVID-19 on consumer buying behavior toward online shopping in Iraq. *Economic Studies Journal*. 2020 Oct 25;18(42):267-80.
- Anastasiadou, E., Anestis, M. C., Karantza, I., & Vlachakis, S. (2020). The coronavirus' effects on consumer behavior and supermarket activities: insights from Greece and Sweden. *International Journal of Sociology and Social Policy*, 40(9/10), 893-907.
- 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.
- Arul Rajan, K. (2020). Influence of hedonic and utilitarian motivation on impulse and rational buying behavior in online shopping. *Journal of Statistics and Management Systems*, 23(2), 419-430,

- Aw, E. C. X. (2019). Understanding the webrooming phenomenon: shopping motivation, channel-related benefits and costs. *International Journal of Retail & Distribution Management*, 47(10), 1074-1092.
- Barnes, S. J., Diaz, M., & Arnaboldi, M. (2021). Understanding panic buying during COVID-19: A text analytics approach. *Expert Systems with Applications*, 169, 114360.
- Beckers, J., Weekx, S., Beutels, P., & Verhetsel, A. (2021). COVID-19 and retail: The catalyst for e-commerce in Belgium?. *Journal of Retailing and Consumer Services*, 62, 102645.
- Bekiempis, V. (2020). Could you buy a little less, please?': Panic-buying disrupts food distribution. *The Guardian*, 23.
- Blakely, F. (2020). The urgency of real-time communication & contactless experiences. *Medallia Zingle*.
- Carmody, J. (2020). Grocers call for end to coronavirus panic buying, saying "nobody is going to starve." *ABC NEWS*.
- Dash, D.K. (2020), "Covid-19 lockdown: Let identified vendors sell essentials, says centre". *Times of India*. 2020.
- Davis, F., Francis Gnanasekar, M. B., & Parayitam, S. (2021). Trust and product as moderators in online shopping behavior: evidence from India. *South Asian Journal of Marketing*, 2(1), 28-50.
- Dinesh, S., & MuniRaju, Y. (2021). Scalability of e-commerce in the COVID-19 era. *International Journal of Research-GRANTHAALAYAH*, 9(1), 123-128.
- Ding, A. W., & Li, S. (2021). National response strategies and marketing innovations during the COVID-19 pandemic. *Business Horizons*, 64(2), 295-306.
- Eger, L., Komárková, L., Egerová, D., & Mičík, M. (2021). The effect of COVID-19 on consumer shopping behaviour: Generational cohort perspective. *Journal of Retailing and consumer services*, 61, 102542.
- Fine, T. (2020), "Marketing in the Age of COVID-19. The Key to Successful Email Campaigns", *Inside Dental Technology*, Vol. 11 No. 6.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics,
- Guthrie, C., Fosso-Wamba, S., & Arnaud, J. B. (2021). Online consumer resilience during a pandemic: An exploratory study of e-commerce behavior before, during and after a COVID-19 lockdown. *Journal of retailing and consumer services*, 61, 102570.
- Habes, M., Alghizzawi, M., Ali, S., SalihAlnaser, A., & Salloum, S. A. (2020). The Relation among Marketing ads, via Digital Media and mitigate (COVID-19) pandemic in Jordan. *International Journal of Advanced Science and Technology*, 29(7), 12326-12348.
- Hair, J. F. (2009). Multivariate data analysis.
- Hashem, T. N. (2020). Examining the influence of covid 19 pandemic in changing customers' orientation towards e-shopping. *Modern Applied Science*, 14(8), 59-76.
- Islam, T., Pitafi, A. H., Arya, V., Wang, Y., Akhtar, N., Mubarik, S., & Xiaobei, L. (2021). Panic buying in the COVID-19 pandemic: A multi-country examination. *Journal of Retailing and Consumer Services*, 59, 102357.
- Ivanović, Đ., & Antonijević, M. (2020). The role of online shopping in the Republic of Serbia during COVID-19. *Economic Analysis*, 53(1), 28-41.
- Karn S, Swain SK. Health consciousness through wellness tourism: A new dimension to new age travelers. *African Journal of Hospitality, Tourism and Leisure*. 2017;6(3):1-9.
- Kaswengi, J., & Diallo, M. F. (2015). Consumer choice of store brands across store formats: A panel data analysis under crisis periods. *Journal of Retailing and Consumer Services*, 23, 70-76.
- Keyes, D. (2020). The Online Grocery Report: The coronavirus pandemic is thrusting online grocery into the spotlight in the US—here are the players that will emerge at the top of the market. *Business Insider*.
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision support systems*, 44(2), 544-564.
- Kim, J., & Park, J. (2005). A consumer shopping channel extension model: attitude shift toward the online store. *Journal of Fashion Marketing and Management: An International Journal*, 9(1), 106-121.
- Kulkarni, S. R., & Barge, P. (2020). Effect of Covid-19 on the shift in consumer preferences with respect to shopping modes (offline/online) for groceries: An exploratory study. *International Journal of Management*, 11(10)..
- Kumar, A., & Kashyap, A. K. (2018). Leveraging utilitarian perspective of online shopping to motivate online shoppers. *International Journal of Retail & Distribution Management*, 46(3), 247-263.

- Leggett, R. (2020). Quality and efficacy may beat out price sensitivities amid coronavirus concerns—Nielsen. Retrieved 9 January 2021.
- Leung, J., Chung, J. Y. C., Tisdale, C., Chiu, V., Lim, C. C., & Chan, G. (2021). Anxiety and panic buying behaviour during COVID-19 pandemic—a qualitative analysis of toilet paper hoarding contents on Twitter. *International journal of environmental research and public health*, 18(3), 1127..
- Machado, A. T. (2006). Drivers of shopping online: a literature review. *Comunicação Pública*, 2(nº4/nº3), 39-50.
- Martino, F., Brooks, R., Browne, J., Carah, N., Zorbas, C. Corben, K. Saleeba, E. Martin, J. Peeters, A., and Backholer, K. (2021), “The Nature and Extent of Online Marketing by Big Food and Big Alcohol During the COVID-19 Pandemic in Australia: Content Analysis Study, Vol. 7 No. 3,
- Mehta, S., Saxena, T., & Purohit, N. (2020). The new consumer behaviour paradigm amid COVID-19: permanent or transient?. *Journal of health management*, 22(2), 291-301.
- Moon, M. A., Khalid, M. J., Awan, H. M., Attiq, S., Rasool, H., & Kiran, M. (2017). Consumer's perceptions of website's utilitarian and hedonic attributes and online purchase intentions: A cognitive–affective attitude approach. *Spanish Journal of Marketing-ESIC*, 21(2), 73-88..
- Naeem, M. (2021). Understanding the customer psychology of impulse buying during COVID-19 pandemic: implications for retailers. *International Journal of Retail & Distribution Management*, 49(3), 377-393.
- Naseri, R. N. N. (2021). Issues And Challenges Of Online Shoppingactivities On The Impact Of Corona Pandemic: A Study On Malaysia Retail Industry. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(10), 7682-7686.
- Nielsen, (2020), “Anticipating consumer needs today and tomorrow”. May 30, 2021.
- Nielsen, (2020), “Understanding consumer sentiment can help companies adjust as the U.S. begins to re-open”, 2021.
- Nunnally, J. C. (1987). Teoría psicométrica, Editorial Trillas. México.
- OECD, (2020), “E-commerce in the time of COVID-19”, 2021.
- Pechtl, H. (2003). Adoption of online shopping by German grocery shoppers. *The International Review of Retail, Distribution and Consumer Research*, 13(2), 145-159..
- Pham, V. K., Do Thi, T. H., & Ha Le, T. H. (2020). A study on the COVID-19 awareness affecting the consumer perceived benefits of online shopping in Vietnam. *Cogent Business & Management*, 7(1), 1846882.
- Redman, R. (Sep 18, 2020), “Online grocery to more than double market share by 2025”, 2021.
- Roy Dholakia, R., & Uusitalo, O. (2002). Switching to electronic stores: consumer characteristics and the perception of shopping benefits. *International Journal of Retail & Distribution Management*, 30(10), 459-469.
- Sehgal, R., Khanna, P., Malviya, M., & Dubey, A. M. (2021). Shopping safety practices mutate consumer buying behaviour during COVID-19 pandemic. *Vision*, 09722629211010990.
- Sharma, A., & Jhamb, D. (2020). Changing consumer behaviours towards online shopping—an impact of Covid 19. *Academy of Marketing Studies Journal*, 24(3), 1-10.
- Sharma, P. (2021). Customer co-creation, COVID-19 and sustainable service outcomes. Benchmarking: *An International Journal*, 28(7), 2232-2258.
- Sohani, A., & Fahmy, T. (2020). The impact of a pandemic on brand preference in purchasing decisions of food and hygiene products: a COVID-19 perspective.
- TAMÁS, S. T., VANDA, P., & ANDRÁS, K. (2021). Panic Buying in Hungary During Covid-19 Pandemic. *Theory, Methodology, Practice*, 17.
- Tata, S. V., Prashar, S., & Parsad, C. (2020). Examining the influence of satisfaction and regret on online shoppers' post-purchase behaviour. *Benchmarking: An International Journal*, 28(6), 1987-2007.
- Tingchi Liu, M., Chu, R., Wong, I. A., Angel Zúñiga, M., Meng, Y., & Pang, C. (2012). Exploring the relationship among affective loyalty, perceived benefits, attitude, and intention to use co-branded products. *Asia Pacific Journal of Marketing and Logistics*, 24(4), 561-582.
- Unnikrishnan, A., & Figliozzi, M. (2021). Exploratory analysis of factors affecting levels of home deliveries before, during, and post-COVID-19. *Transportation Research Interdisciplinary Perspectives*, 10, 100402.
- Wilson, B. (2020), “Off our trolleys: What stockpiling in the coronavirus crisis reveals about us. The Guardian”
- Zulauf, K., Cechella, F. S., & Wagner, R. (2021). The bidirectionality of buying behavior and risk perception: an exploratory study. *The International Review of Retail, Distribution and Consumer Research*, 31(5), 566-590.
- Zwanka, R. J., & Buff, C. (2021). COVID-19 generation: A conceptual framework of the consumer behavioral shifts to be caused by the COVID-19 pandemic. *Journal of International Consumer Marketing*, 33(1), 58-67.

Received: 24-Aug-2023, Manuscript No. AEJ-23-14013; **Editor assigned:** 28-Aug-2023, PreQC No. AEJ-23-14013(PQ); **Reviewed:** 11-Sep-2023, QC No. AEJ-23-14013; **Revised:** 16-Sep-2023, Manuscript No. AEJ-23-14013(R); **Published:** 22-Sep-2023