

Contradictory Narratives on Drivers and Barriers of Online Shopping Intentions for Apparel among Customers in Kerala

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Abstract

Apparels are the frills of social embellishment and the medium for defining one's personality. The rapid advancement in information technology, online banking, and smartphone accessibility has resulted in exponential growth in online apparel shopping in developing countries, with India ranking second in market potential. A spectrum of internal and external factors influences people's intentions to buy online, with customers' attitudes shaped by perceptions being the most influential one. The descriptive study using first-hand data investigates the perceptions regarding drivers and barriers of online shopping intentions for apparel among online and offline preferring customers in Kerala. There are diverging arguments for and against online apparel shopping, labelled as drivers and barriers. The discussions hint that, for customers who prefer to shop online, the perceived impact of drivers outweighs the barriers. However, customers who prefer offline outweigh the impact of barriers on online shopping intentions rather than what drivers could exert. The study concludes that people's perceptions of how drivers and barriers impact their online apparel shopping intentions serve as the foundation for their preferences of being online or offline. The contradictory narratives of the perceived impact of drivers and barriers on customers' online shopping intentions have classified strategic implications for businessmen in understanding consumer behaviour patterns and effectively enrooting their products.

Keywords: Online apparel shopping, Drivers, Barriers, Perceived impact, Shopping intentions, Conceptual model

Introduction

Online shopping, one of the most beneficial offshoots of the IT revolution, has transformed the entire retail spectrum by allowing customers to shop around the clock. Rapid penetration of the Internet and smartphone, combined with the proliferation of e-payment facilities, brought exponential growth in online shopping worldwide. As a result, online stores are available for a variety

of products, and consumers can fine-tune their search to find what they need with a few clicks. Likewise, the detailed product descriptions given by online stores enable customers to compare items and purchase what best suits their tastes and budgets. In most cases, online shopping sites provide product reviews and ratings by previous customers to guide and influence potential buyers, which is something not typically found in offline mode. In online

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shopping, customers can also avoid the pressure of making a rush purchase by adding the desired products to shopping carts to buy later at their leisure. The ease and convenience of online shopping make it customer-friendly, causing noticeable shifts in people's buying habits, inclining towards online mode. Besides all, with appropriate behavioural adaptations, online shopping is gaining popularity as a better alternative for unusual situations (UNCTAD, 2020), which calls for a re-engineering of traditional logistics.

Backdrop of the Study

India, the second-largest country in population and active Internet users (Statista, 2022), offers an ideal climate for e-commerce to flourish. According to the India Brand Equity Foundation report, India's e-commerce industry is booming, and it estimates revenues to touch US \$ 99 billion by 2024. Also, the share of online stores to gross retail business in the country has been showing an upward trend over the years. The online retail penetration in India is expected to rise from 4.7 percent in 2019 to 10.7 percent in 2024, with grocery, consumer electronics, and apparel as key growth drivers (IBEF, 2021). Despite having a comparatively low population size, Kerala, a state with high digital literacy, provides a sizable customer base for online businesses and has the potential to emerge as a leading e-commerce state in India.

The systemic change in the new normalcy infusing the online shopping cult in general, and the apparel industry is not aloof. The Indian textile industry has a long tradition dating back many centuries. The fame of Indian apparel spreads across continents, winning many laurels in recognition of its fine quality. Online marketplaces have become the major trading platform for apparel, and one can find several global and local online sellers dealing with a wide variety of clothing items. Enticed by greater convenience, discounts, and selection, more and more customers are now preferring online modes of purchasing apparel (Kushwaha, 2020). The vast Internet-

accessing population and rising consumer spending in Kerala provide an opportunity for online apparel sellers to expand their customer base in the state. The growth in online business is also good for the state economy, as it raises tax revenues and triggers an economic multiplier effect through increased consumption. A blend of internal and external factors influences people's intentions to buy online, with customers' attitudes shaped by perceptions being the most influential. As a result, online retailers must understand how customers perceive the benefits and limitations of online apparel shopping, acting as drivers and barriers to their online purchase intentions. Such an understanding can also provide the inputs for online sellers to fine-tune their strategies for retaining existing customers and elicit a shift in offline preferring customers' shopping intentions towards online. Further, offline (in-store) apparel sellers can better understand what persuades and dissuades people from buying online and then develop plans to maintain their position intact as the most preferred option among shoppers.

The benefits of online shopping for clothing have a positive impact on customers' intention to shop online. However, customers' perception of risk associated with online shopping diminishes these benefits, resulting in non-preference for buying apparel online (Akram, 2018). Overcoming the barriers is crucial for the success of online shopping which offers opportunities for both retailers and customers (Jain & Kulhar, 2019). As the approach of taking the customers as a chosen crowd driven by commercials and demand no longer holds the rules of retail, now the in-store and online shopping demarcations govern the domain of the retail trade. Therefore, it is the need of the hour to evaluate the nature of the interplay of the barriers and drivers for online shopping in the apparel retail trade in Kerala. Therefore, the study seeks to delineate the perceived impact of drivers and barriers to online shopping intentions for apparel retail in Kerala and how they differ between online and offline shopping preferences.

Objectives and Methodology

The present study seeks to assess the perceptions regarding drivers and barriers to online shopping intentions for apparel among online and offline preferring customers in Kerala. It also aims to conduct a customer preference-based comparative analysis of the perceived impact of drivers and barriers on their shopping intentions. More importantly, the study intends to examine and analyse how each customer group perceives the impact of drivers and barriers on online shopping intentions to identify which one is dominant and see whether the difference in impact is significant. In light of these objectives, the following research hypotheses have been formulated for testing their statistical significance.

- H₁: The perceived impact of drivers on online shopping intentions for apparel significantly differ between online and offline preferring customers.
- H₂: The perceived impact of barriers on online shopping intentions for apparel significantly differs between online and offline preferring customers.
- H₃: The perceived impact of drivers on online shopping intentions is significantly higher than barriers for customers preferring online.
- H₄: The perceived impact of barriers on online shopping intentions is significantly higher than drivers for customers preferring offline.

The study is descriptive and analytical, based on primary data collected through a structured interview schedule during the fourth quarter of 2022. The target population of the study includes all apparel shoppers in Kerala.

Since the population comprises customers who shop online, offline, and both, the data were collected from 200 customers, ensuring 100 from each group, namely, customers preferring online shopping and customers preferring offline shopping.

Review of Literature

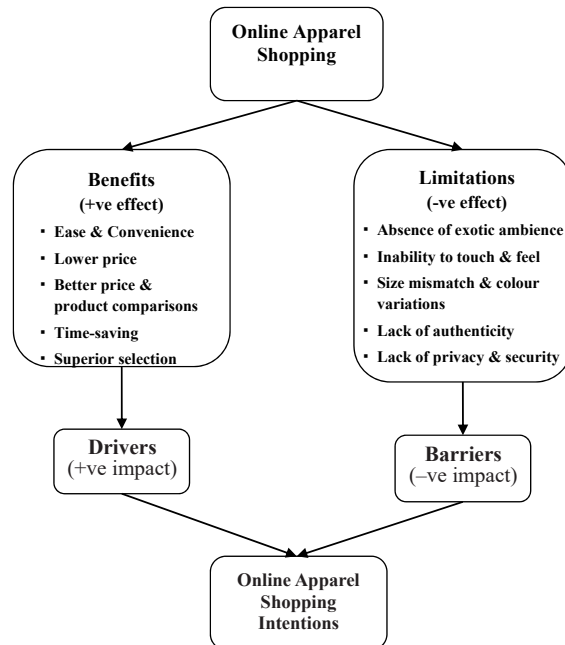
Literature in the online shopping domain has been enriched theoretically and methodologically, with studies extensively analysing factors influencing online purchase intentions and developing buying behavioural models. Several studies endorse that the attitude of customers has a significant effect on their online shopping intentions (Helander & Khalid, 2000; Khalifa & Limayem, 2003; Kim et al., 2005; Wu, Ching Ke, 2015). The formation of customers' attitudes depends on how they perceive the benefits and limitations of online shopping against offline shopping. Online shopping bestows several benefits, the most documented of which is the convenience of shopping anytime from any location (Agyapong, 2017; Ashwini & Manjula, 2016; Kinker & Shukla, 2016; Siddiqui et al., 2003; To et al., 2007). Attractive price is also one of the most influential factors in bringing a positive attitude toward online shopping (Agyapong, 2017; Rajyalakshmi, 2015; Shanthi & Desti, 2015). In addition, online shopping offers accessibility to a wide variety of products and brands (Ashwini & Manjula, 2016), and detailed product information enables customers to make better price and feature-wise comparisons while shopping (Verma & Aimol, 2014).

However, the literature also accounts for certain inherent limitations of online shopping. One of such limitations is the perceived risk of security (Dharshan, & Reddy, 2019; Khalil, 2014) and privacy concerns due to hacking (Jayasubramanian et al., 2015) and phishing or identity theft (Hemalatha & Balakrishnan, 2017), negatively affecting the purchase intentions (Almoussa, 2014; Brown & Muchira, 2004; Hsu & Luan, 2017). Likewise, the inability to touch the product (Kiran et al., 2008; Rathee & Rajan, 2019) denies customers the opportunity to inspect the quality of materials, and they fear going online may end up receiving an inferior product. Another big concern is the misfit (Noordin et al., 2018) caused by the variation in measurements and shape, which is extremely important for

clothing and footwear where fit matters a lot. Customers are also concerned about the likely differences in appearance between the displayed and actual product (Nitse et.al, 2004). The Organisation for Economic Co-operation and Development (2021) reports that e-commerce platforms are used for selling counterfeit and pirated products, which ultimately has a damaging effect on economic growth. This raises concerns about the authenticity and genuineness of the products sold by online retailers. Consequently, people often see traditional in-store shopping as more beneficial, as scammers may place fake and unworthy products in online shopping (Tseng, 2016). Above all, customers can't have the same joyful experience in online shopping mode as they could feel otherwise in a colourful offline in-store setting, coupled with the pleasure of an outing (Sarkar & Das, 2017).

Since risk factors differ across products, customers' perceptions vary depending on the product type they are shopping for online (Zhou et al., 2007). Although measured using a different set of variables, the present study uses the terminologies *drivers* and *barriers* used by Lian and Yen (2014) to study online shopping intentions, as well as the idea shared by Sivanesan et al. (2017) of comparing offline and online decisions of customers. The study examines the perceived impact of drivers and barriers on online shopping intentions, as applied to the specific context of apparel, using the conceptual model shown in Figure 1. The model depicts two streams of diametrically opposite relationships between drivers and the barriers to online apparel shopping intentions. The perceived positive impact of benefits and the negative impact of limitations typically translate into drivers and barriers, thus impacting online apparel shopping intentions.

Figure 1
Conceptual Model



Note. Conceptual model for online apparel shopping.

Customer Perception

Perception is a process through which individuals organise and interpret their sensory impressions to give meaning to their surroundings. The way one perceives something depends on the object, the situation, and the beliefs and views of that person. When considering online shopping for apparel, customers weigh its potential benefits and limitations against buying them in person at an offline store. The benefits will act as drivers and the limitations as barriers to their intentions to shop apparel online. As stated before, peoples' perceptions regarding the benefits and limitations of online shopping shape their attitudes, which affect their purchase intentions. As a result, a proper assessment and analysis of customers' perceptions about the benefits and limitations of online shopping for apparel can bring out the underlying reasons for their preference.

Drivers and Barriers

The potential benefits of online shopping positively influence customers' online purchase intentions, and they are bundled together in this study as *drivers*. Literature suggests that convenience, lower price, better price and product comparison, time-saving, and superior selection are the main benefits of online apparel shopping. The *convenience* stems from the ease of shopping online as sites are open 24 hours a day, seven days a week, allowing customers to place apparel orders anytime when the Internet is accessible. In contrast, in offline (in-store) mode, customers can shop only during business hours, and that too by reaching their location physically. Again, some online stores accept orders even for out-of-stock items promising delivery as soon as products are available. Customers can benefit from *lower prices* because online shopping business models are more cost-effective, allowing them to offer better discounts on apparel. Therefore, they can buy products of the same brand online at a lower price than in offline stores. Online shopping also allows for *better price and product comparison* because

websites display the whole range of apparel with specifications such as brand name, price, discount rate, size, material type, colour, style, fit type, product rating, customer reviews, and so on. Online shopping *saves time* because it gives the opportunity to shop from home or the office, eliminating the need to drive back and forth as in offline shopping. It also saves time for shopping by customisation of search preferences and avoiding billing and payment delays. Another benefit of online shopping is providing a *superior selection* of apparel to offline stores, with a limited choice for each item.

The potential limitations of online shopping negatively influence customers' online purchase intentions, and in the study, they are collectively labelled as barriers. The literature indicates that the main limitations of online apparel shopping include the absence of an exotic shopping ambience, inability to touch and feel, size mismatch and colour variation, suspicion over authenticity, and lack of privacy and security. The absence of exotic ambience represents the inability of online sites to provide the same kind of pleasant experience created by offline stores through a blend of colour, mood, and interactions. Inability to touch and feel the fabric makes online apparel shopping less appealing, as descriptions of items are not always sufficient to make an accurate judgment about the type and quality of the material. Again, the chances for size mismatches and colour variations are more in online shopping than in a brick-and-mortar store. The measurements of apparel can vary between brands, even within the same standard size. Even though size charts are available, the lack of a trial option that helps in finding the perfect fit may deter people from buying clothing online, at least in cases where size matters the most. The original colour of apparel may not correspond to what is displayed online; hence people may not prefer online to avoid post-purchase regret. The widespread news about the risk of fake or pirated products sold at huge discounts raises people's suspicion over the authenticity and

genuineness of products sold online. Finally, people's concern about the lack of privacy and security hinders them from shopping online. The concerns regarding privacy and security of personal data stored by online retailers, leave shoppers feeling vulnerable to cyber threats.

Data Analysis and Discussion

In assessing the impact of drivers and barriers on online shopping intentions, the study collected customers' opinions on five statements on a 5-point Likert scale ranging from *very low* to *very high*. Then, the qualitative expressions were converted into scores by assigning numerical values such as 1 for very low, 2 for low, 3 for moderate, 4 for high, and 5 for very high. The Cronbach alpha values of five items for the two constructs, drivers (0.879) and barriers (0.813), exceeded the recommended threshold of 0.70, confirming the reliability of the measurement scale (Nunnally & Bernstein, 1994). At first, the perceived impact of drivers and barriers on online shopping intentions was derived from the summated mean score values for benefits and limitations. Following this, a customer group-wise comparison of the impact of drivers and barriers was made to demonstrate the perceptual differences based on their shopping preferences and then tested the significance using an Independent sample t-test. The study also compared the impacts of drivers and barriers to see whether one significantly outweighed the other for any customer group by applying

the paired sample *t*-test. Further, the magnitude of the effect was measured using Cohen's *d* and interpreted the result according to Sawilowsky's added conventions that a value between 1.2 and 2 shows a very large effect and a huge effect if the value is greater than 2.

The perceived impact of drivers on online shopping intentions is significantly different between online and offline preferring customers (Table 1). The statistical analysis ($t=14.118$, $p < 0.001$) supported the rejection of the null hypothesis that the perceived impact of drivers on online shopping intentions for apparel significantly differs between online and offline preferring customers. Online customers perceived a very high positive impact for drivers on their online shopping intentions, whereas it was moderate for offline-preferring customers. The perceived impact of benefits was significantly different for both groups, with online customers believing that convenience and lower prices have a very high impact (Mean= > 4.50), better price and product comparison, superior selection, and time-saving have a high impact (Mean= 3.50<4.49), and offline customers assigning a high impact for convenience and lower prices, a moderate impact (Mean=2.50<3.49) for a better price and product comparison and the superior selection and a low impact (Mean=1.50<2.49) for time-saving on online shopping intentions.

Table 1
Perceived Impact of Drivers – Customer Preference-wise

| Benefits of Online Apparel Shopping | Online Preferring Customer | Offline Preferring Customer | t | Sig. (2-tailed) |
|---|----------------------------|-----------------------------|--------|-----------------|
| The impact of <i>ease and convenience</i> on online shopping intentions for apparel. | 4.70 | 3.96 | 6.812 | ** |
| The impact of <i>lower prices</i> on online shopping intentions for apparel. | 4.60 | 3.78 | 7.293 | ** |
| The impact of a <i>better price and product comparison</i> on online shopping intentions. | 4.28 | 3.02 | 9.727 | ** |
| The impact of <i>time-saving</i> on online shopping intentions for apparel. | 4.02 | 1.98 | 19.911 | ** |
| The impact of <i>superior selection</i> on online shopping intentions for apparel. | 4.22 | 3.04 | 9.618 | ** |
| Drivers (Summated Mean) | 4.36 | 3.16 | 14.118 | ** |

Note. Primary data ** Significant at 1 percent level

The impact of potential limitations of online shopping acting as barriers to online purchase intentions are perceived differently by online and offline preferring customers. Statistically, this difference was significant ($t = -20.963, p < 0.001$) (Table 2), rejecting the null hypothesis that the perceived impact of barriers on online shopping intentions for apparel significantly differs between online and offline preferring customers. Customers preferring offline shopping perceived the negative impact of barriers as very high, whereas the moderate impact by online-preferring customers. Offline customers attributed a very high impact to the absence

of an exotic shopping atmosphere, size mismatch, and colour variation, inability to touch and feel, suspicion of authenticity and genuineness, and lack of privacy and security as barriers to their online shopping intentions. On the other hand, online customers attributed a moderate impact to the absence of an exotic shopping ambience, inability to touch and feel, suspicion over authenticity; low impact for size mismatch and colour variation, and lack of privacy and security as barriers to online shopping intentions. The differences in the perceived impact of the limitations between customer groups were highly significant in every case.

Table 2
Perceived Impact of Barriers – Customer Preference-wise

| Limitations of Online Apparel Shopping | Online Preferring Customer | Offline Preferring Customer | t | Sig. (2-tailed) |
|---|----------------------------|-----------------------------|---------|-----------------|
| The impact of the <i>absence of exotic shopping ambience</i> on online shopping intentions for apparel. | 3.31 | 4.82 | -14.865 | ** |
| The impacts of <i>size mismatch and colour variation</i> on online shopping intentions. | 2.27 | 4.32 | -17.149 | ** |
| The impact of the <i>inability to touch and feel</i> on online shopping intentions for apparel. | 3.26 | 4.32 | -8.820 | ** |
| The impact of <i>suspicion over authenticity and genuineness</i> on online shopping intentions for apparel. | 3.28 | 3.98 | -4.805 | ** |
| The impact of <i>lack of privacy and security</i> on online shopping intentions for apparel. | 2.22 | 4.14 | -16.939 | ** |
| Barriers (Summated Mean) | 2.88 | 4.32 | -20.963 | ** |

Note. Primary data ** Significant at 1 per cent level

For customers who prefer to shop online, the perceived positive impact of drivers outweighs the negative impact of barriers on their online shopping intentions (Table 3). They see the cumulative effect of benefits acting as drivers as having a very high positive impact on their online purchase intentions and only a moderate negative impact from barriers. The *d*-value (>2) shows that online

customers believe drivers have a huge impact on their purchase intentions and which is also significantly higher than what the barriers could do ($t=21275, p < 0.001, d=2.013$). It rejects the null hypothesis that the perceived impact of drivers on online shopping intentions is not significantly higher than barriers for customers preferring online.

Table 3
Difference in Perception between Drivers and Barriers among Online Preferring Customers

| Construct | Mean | Std. Deviation | Mean Difference | Std. Deviation | Cohen's d | t | Sig. (1-tailed) |
|-----------|------|----------------|-----------------|----------------|-----------|--------|-----------------|
| Drivers | 4.36 | 0.517 | 1.488 | 0.635 | 2.34 | 23.449 | ** |
| Barriers | 2.88 | 0.482 | | | | | |

Note. ** Significant at 1 percent level

In contrast, customers who prefer offline outweigh the negative impact of barriers on online shopping intentions than what drivers could exert (Table 4). They perceive the cumulative effect of limitations acting as barriers had a very high negative impact on their online shopping intentions, as against the moderate impact of drivers. For them, a *d*-value

between 1.2 and 2 showed that barriers had a very large impact on their online purchase intentions, which was also significantly higher than that of drivers ($t = -16.973, p < 0.001, d = -1.70$). It consequently led to the rejection of the null hypothesis that the perceived impact of barriers on online shopping intentions is not significantly higher than *drivers* for customers preferring offline.

Table 4
Difference in Perception between Drivers and Barriers among Offline Preferring Customers

| Constructs | Mean | Std. Deviation | Mean Difference | Std. Deviation | Cohen's d | t | Sig. (1-tailed) |
|------------|------|----------------|-----------------|----------------|-----------|---------|-----------------|
| Drivers | 3.16 | 0.681 | -1.160 | 0.683 | -1.70 | -16.973 | ** |
| Barriers | 4.32 | 0.488 | | | | | |

Note. ** Significant at 1 percent level

Conclusion

Online and offline apparel stores coexist to meet the diverging clothing needs of people. The purpose of this study was to assess and analyse the impact of drivers and barriers on people's intentions to shop for apparel online. The study captured how customers perceive the potential benefits and limitations of online apparel shopping impacting their purchase intentions. Benefits such as convenience, lower prices, better price and product comparisons, time-saving, and superior selection were considered into account to understand how they contribute to people's online shopping intentions. Limitations such as the absence of an exotic shopping ambience, the inability to touch and feel, size mismatches and colour variations, suspicion of authenticity and genuineness, and a lack of privacy and security were used to study the negative impact of barriers. The study deciphers the online shopping intentions as a manifestation of the positive impact of drivers, appreciated by the benefits of online apparel shopping, and the negative impact of barriers, discounted by the limitations.

The findings from the preceding analysis revealed that customers have contradictory views on the impact of drivers and barriers on their intent to shop online based on their shopping-mode preferences. People's views on the impacts of drivers and barriers can affect their preference to shop online or offline. Positive perceptions of drivers encourage people to prefer online shopping while outweighing the negative impact of barriers prompts people to prefer the offline mode. As people's perceptions of drivers and barriers interact inversely, a higher perception of one tempts them to understate the other. Therefore, online apparel retailers should strive to make online shopping more attractive by creating an exotic shopping ambience, nullifying mismatch and colour variation, and increasing privacy and security features. Within add-on features on minimising barriers to elicit a positive perceptual change to increase their customer base.

Managerial Implication

The study sheds light on how each benefit and limitation contributes to forming customers' perceptions regarding the impact of

drivers and barriers on their online shopping intentions for apparel. By minimising limitations, online stores can turn customers' preferences in their favour, as it discounts the impact of barriers and makes people see the benefits more clearly. This could help them in retaining existing customers and shift customer preferences from offline to online. To attract more people to shop online, stores must create a lively atmosphere on their digital interface. This could include making the display more like a showroom and playing music with an option for customisation. Although the fragrance and cosy interiors of offline stores cannot be recreated online, an aesthetically pleasing interface can be created to make up for it. For ready-to-wear clothing, insist manufacturers to ensure that the measurements and fit are consistent between brands, or else stores should show the differences between brands. Adopting measures such as facilities to verify authenticity, better images, virtual trial rooms, and pop-up messages reinforcing privacy and security can help online sellers to expand their customer base and business volume. The study was confined only to a set of major benefits and limitations of online apparel shopping that hint at its limitations. Further research on the factors influencing online shopping based on customers' socio-economic and psychological profiles is needed to provide a better-personalised experience of online shopping. Despite this, the contradictory narratives of the perceived impact of drivers and barriers on customers' online shopping intentions have classified strategic implications for businessmen in understanding consumer behaviour patterns and effectively enrooting their products.

References

Agyapong, H. A. (2017) 'Exploring the influential factors of online purchase', Doctoral Dissertation, <https://core.ac.uk/download/pdf/161426026.pdf>

Akram, M. S. (2018). 'Drivers and barriers to online shopping in a newly digitalized society'. *TEM Journal*, 7:1, 118–127.

Almoussa, M. (2014) 'The Influence of Risk Perception in Online Purchasing Behavior: Examination of an Early-Stage Online Market', *International Review of Management and Business Research*, 3:2, 779–787.

Ashwini, N. and Manjula, R. (2016) 'An Empirical Study on Consumers Perception Towards Online Shopping', *International Journal of Management and Commerce Innovations*, 3:2, 1103–1110.

Brown, M. and Muchira, R. (2004) 'Investigating the relationship between Internet privacy concerns and online purchase behavior', *Journal of Electronic Commerce Research*, 5:1, 62–70.

Dharshan, E. M. and Reddy, J. A. (2019) 'A study of customer behaviour towards online shopping in Hyderabad', *International Journal of Trend in Scientific Research and Development*, 3:2, 741–744. <https://doi.org/10.31142/ijtsrd21407>

Helander, M. G., and Khalid, H. M. (2000) 'Modeling the customer in electronic commerce', *Applied Ergonomics*, 31:6, 609–619.

Hemalatha, J. and Balakrishnan, L. (2017) 'Consumer Behaviour towards Online Shopping: Structural Equation Modeling Approach', *Amity Journal of Marketing*, 2:1, 49–60.

Hsu, S.H. and Luan, P.M. (2017) 'The Perception Risk of Online Shopping Impacted on the Consumer's Attitude and Purchase Intention in Hanoi, Vietnam', *Journal of Business and Economic Policy*, 4:4, 19–29.

IBEF (2021) *Indian e-Commerce Industry Report- January 2021*, India Board Equity Foundation.

Jain, R. and Kulhar, M. (2019). "Barriers to online shopping". *International Journal of Business Information Systems*, 30:1, 31–50.

Jayasubramanian, P., Sivasakthi, D. and Ananthi Priya, K. (2015) 'A Study on

- Customer Satisfaction towards Online Shopping', *International Journal of Applied Research*, 1:8, 489–495.
- Khalifa, M., and Limayem, M. (2003) 'Drivers of internet shopping', *Communications of the ACM*, 46:12, 233–239. <https://doi.org/10.1145/953460.953505>
- Khalil, N. (2014) 'Factors affecting the consumer's attitudes on online shopping in Saudi Arabia. *International journal of scientific and research publications*, 4:11, 1–8.
- Kim, J. and Park, J. (2005) 'A consumer shopping channel extension model: attitude shift toward the online store', *Journal of Fashion Marketing and Management*, 9:1, 106–121.
- Kinker, M., and Shukla, N. K. (2016) 'An Analysis of Consumer Behaviours towards Online Shopping of Electronic Goods With special reference to Bhopal and Jabalpur city, *International Journal of Innovation and Applied Studies*, 14:1, 218–235.
- Kiran, R., Sharma, A., and Mittal, K. C. (2008) 'Attitudes, preferences, and profile of online buyers in India: changing trends', *South Asian Journal of Management*, 15:3, 55–73.
- Kushwaha, D.W. (2020). 'Preference and Satisfaction Towards Online Apparel Purchase: A Customer Perspective'. *The IUP Journal of Marketing Management*, 19:2, n47-67 <https://ssrn.com/abstract=3805475>
- Lian, J. W., and Yen, D. C. (2014) 'Online shopping drivers and barriers for older adults: Age and gender differences, *Computers in human behavior*, 37, 133–143.
- Nitse, P. S., Parker, K. R., Krumwiede, D., & Ottaway, T. (2004). The impact of color in the e-commerce marketing of fashions: an exploratory study. *European Journal of Marketing*, 38(7), 898–915.
- Noordin, S., N.S. Ashaari and Wook, T. S. M. T. (2018) 'A proposed model for virtual fitting room based on usability and profound emotional elements', *International Journal on Advanced Science, Engineering and Information Technology*, 8:6, 2332-2340.
- Nunnally, Jum C., and Bernstein, Ira H., (1994) *Psychometric theory (3ed.)*. New York: McGraw-Hill Inc.
- OECD/EUIPO, (2021). Misuse of E-commerce for Trade in Counterfeits, Illicit Trade, Paris: OECD Publishing <http://doi.org/10.1787/1c04a64e-en>
- Rajyalakshmi, N. (2015) 'Factors influencing online shopping behavior of urban consumers in India', *International Journal of Online Marketing*, 5:5, 38–50.
- Rathee, R. and Rajan, P. (2019) 'Online shopping environments and consumer's Need for Touch', *Journal of Advances in Management Research*, 16:5, 814–826
- Sarkar, R. and Das, S. (2017) 'Online Shopping vs Offline Shopping: A Comparative Study', *International Journal of Scientific Research in Science and Technology*, 3:1, 424–431.
- Sawilowsky, S. S. (2009) 'New effect size rules of thumb', *Journal of Modern Applied Statistical Methods*, 8:2, 597–599.
- Shanthi, R. and Desti, K. (2015) 'Consumers' perception on online shopping, *Journal of Marketing and Consumer Research*, 13, 14–21.
- Siddiqui, N., O'Malley, A., McColl, J. C. and Birtwistle, G. (2003) 'Retailer and consumer perceptions of online fashion retailers: Web site design issues', *Journal of Fashion Marketing and Management: An International Journal*, 7:4, 345–355.
- Sivanesan, R., Monisha, C., Babisha, V., & Abisha, A. (2017) 'Comparative Study on Factors Influencing Online and Offline

- Shopping', *International Journal of Research in Management & Business Studies (IJRMBS)*, 4:3, 26–34.
- Statista, (2022). <http://statista.com/topics/2157/internet-usage-in-India>
- To, P., Liao, C., and Lin, T. (2007) 'Shopping motivations on the internet: A study based on utilitarian and hedonic value. *Technovation*', 27:12, 774–787. <https://doi.org/10.1016/j.technovation.2007.01.001>
- Tseng, S. Y. (2016) 'Bringing Enjoy Shopping by Using Credit Cards: The Antecedents of Internal Beliefs', *Journal of Economics and Economic Education Research*, 17:3, 16–28
- UNCTAD. (2020). COVID-19 and E-Commerce: A Global Review. United Nations Conference on Trade and Development. https://unctad.org/system/files/official-document/dtlstict2020d13_en_0.pdf
- Verma, R. and Aimol, A. (2014) 'Consumers Attitude towards Online Shopping', *International Journal of Engineering Science and Innovative Technology (IJESIT)*, 3:5, 153–157.
- Wu, W. and Ke, C. (2015) 'An online shopping behavior model integrating personality traits, perceived risk, and technology acceptance', *Social Behavior and Personality: an international journal*, 43:1, 85–97. <https://doi.org/10.2224/sbp.2015.43.1.85>
- Zhou, L., Liwei, D. and Zhang, D. (2007) 'Online Shopping Acceptance Model-A Critical Survey of Consumer Factors in Online Shopping', *Journal of Electronic Commerce Research*, 8:1, 41–62.