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The Impact Of Covid19 Lockdowns On The Preferences Of Online Apparel Shoppers In Delhi

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Abstract:
Background: *Online apparel stores came to the rescue of apparel consumers who were unable to buy from physical stores during the Covid19 pandemic resulting in increased online sales. However, questions have been raised about the sustenance of the raised tempo in ecommerce growth in the post pandemic period.*
Materials and Methods: *This study is based on a sample survey done in Delhi during the closing phase of the pandemic. The survey collected demographic, psychographic and behavioral variables. Factor analysis was performed to derive the preference and behavioral patterns from the data.*
Results: *This study finds that the pandemic not only proved the advantages of online apparel stores but also helped enhance their future prospects. It finds that that the pandemic has led to favourable changes in the perceptions and preferences of consumers towards online apparel purchases. The study identifies trust as the most important factor influencing online apparel buying decisions. Price/Discounts and Brands are the next most important factors. Though Marketing/Advertising and Convenience emerged as other relevant factors, it appears as though these are now part of consumers' standard expectations, which while necessary might not lead to a purchase decision.*
Conclusion: *This study explains why Indian ecommerce market continues to grow significantly in the post covid19 period also. It also finds merit in using the 4Cs of marketing as an appropriate basis for ecommerce consumer segmentation and evaluating online apparel store performance and prospects.*
Key Word*: Apparel Consumer Behaviour; Online Apparel Shoppers; Online buying decision; Indian Apparel ecommerce; Covid19 Impact*

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I. Introduction

The second decade of the current millennium rightfully belongs to Business to Consumer (B2C) ecommerce. It is priming a paradigm shift in the retail sector as its share in the overall retail trade is steadily climbing. Between 2010 and 2020, the share of B2C ecommerce has grown in every part of the world except Africa - from 2% to over 20% in Asia and North America; from 4% to 15% in Western Europe; from to 2% to 15% in Oceania and from 1% to 13% and 9% respectively in Eastern Europe and Latin America (Morgan Stanley, 2022). Apparel is among the front runners in the B2C ecommerce race in most countries. Worldwide online fashion market comprising apparel, accessories and footwear is estimated to reach $ 1.1 trillion by 2026 rising from $668.1 billion in 2021. The apparel segment alone had overall online revenue of $ 441 billion in 2021, which is projected to rise to $ 475 billion in 2022 (ecommerce fastlane, 2022).

India is now among the top 10 economies in the world ranked by B2C ecommerce sales. As of 2019, India's B2C ecommerce sales was $61 billion with 70 million online shoppers who constituted 20% Internet users in the country (UNCTAD, 2020). India's B2C ecommerce sales are expected to reach US$ 74.8 billion in 2022 and US$ 350 billion by 2030 making India the third largest ecommerce market in the world (IBEF, 2022). The share of online B2C sales in the total retail sales has also been steadily rising from 2.2% in 2017 to 4.4% in 2019 and 6.5% in 2021 (IMF, 2022) and is projected to go up to 10.2% by 2030 (IBEF, 2022). Rapid growth in the B2C apparel ecommerce has been a major feature the overall growth of B2C ecommerce in India. In 2020, online sales of apparel were tied at the top with consumer electronics - with a 40% share in the total online sales of all items.

The unusually higher rate of growth in B2C ecommerce in general and in the apparel segment in particular observed during the Covid19 pandemic is attributed to the lockdowns imposed in this period - raising the question whether B2C ecommerce would be able to sustain the momentum it gathered during the lockdowns. While there have been several studies done by academic researchers and business research companies, the research publications of multilateral institutions are not only comprehensive but also provide publicly accessible multi country data. In its preliminary assessment of Covid19 impact, the United Nations Conference on Trade and

Development (UNCTAD) brought out, based on national data from seven countries which accounted for 65% of global B2C ecommerce, that there was a more than average increase of 3 percentage points (pp) in the share of B2C ecommerce in total retail during 2020 over a 2 pp increase in 2019. It also added that the impact was not uniform across all countries. (UNCTAD, 2020). The OECD tech-brief on tackling covid19 cites examples of significant spikes in the share of ecommerce during the lockdown periods in countries like the US, UK and China and points out that there has been not only a shift in the pattern of consumer demand for ecommerce away from luxury goods and in favor of daily essentials but also demand for new products. The lockdowns also witnessed senior citizens and new firms entering the ecommerce foray. Noting that not all sellers and product categories benefited from the Covid19 lockdowns, it observes that some of the shifts that happened during the lockdowns can be expected to have long term impact on the e-commerce sector. It expects the new online shoppers who used credit cards for the first time in B2C transactions and contributed the higher share of ecommerce in total retail during the lockdowns are likely to continue to shop online in future as well (OECD, 2020). However, a recent IMF working paper on ecommerce, based on analysis MasterCard data for 47 economies and 26 sectors, points out that the rise in the share of ecommerce in total retail observed during the Covid19 lockdowns were mostly transitory. It, no doubt, acknowledges that India and Brazil along with a few other smaller economies as well as a few categories like departmental stores, electrical appliance and clothing are exceptions. The standout behavioral pattern of Indian online shoppers is highlighted in a global consumer survey by McKinsey & Company covering 45 countries. Indian ecommerce consumers top the list of countries where people are willing to try out new ecommerce alternatives; among the top three who are most optimistic about post-covid19 economic recovery and also willing to shift to online shopping during the festival season (McKinsey, 2020).. In the context of the above, the present study acquires significance in as much as it seeks to update the knowledge about the perceptions and preferences of Indian consumers towards apparel ecommerce and provide an analysis of their behavior during the Covid19 lockdowns.

II. Literature Survey

Ecommerce research encompasses the confluence of computer science, economics and commerce. Researchers from each of these domains have contributed to the understanding of the ecommerce phenomenon, albeit from different perspectives. One of the key findings of the present literature survey is that the focus of ecommerce research has also been shifting in step with the evolution of ecommerce over the past three decades. In early stages of ecommerce development, particularly in the 1990's, the dominant research objective was to help ecommerce software developers and site operators. The successful launch of Amazon online bookstore in 1995 over the fully commercial Internet operated by America Online followed by the setting up Ebay auction platform in 1996 resulted in an unprecedented ecommerce startup boom in the US leading to the launch of around 600,000 ecommerce sites by 2000 (Yan and Concetta, 2006). It was however, followed by a dot com bust in 2001 and 2002 (UNCTAD, 2001) which changed the course of ecommerce research. During the first decade of the current millennium, ecommerce research was on building and using ecommerce models based on old and new theories that helped evaluate ecommerce sites, particularly from an investment perspective. The literature survey in a 2007 computer science PhD thesis shows how the ecommerce research in the first five years of the current millennium was devoted to the understanding of the ecommerce user, the user's task and behavior, particularly the decision making process for the purpose of developing the most appropriate ecommerce site interaction design (Lillian, 2007).

Towards meeting the growing need for research from ecommerce businesses as well as technology/platform developers, several consumer attitude-behavior based models emerged. Over time, these models went through several iterations of enhancements, extensions, modifications and empirical verifications. Mamta et al. provide a bird's eye view of the variety of theories and models used in the ecommerce research done prior to 2015. These fall into broad genres such as 1) Technology Adoption/Acceptance Model (TAM) which also included the Theory of Reasoned Action (TRA) to add prediction capabilities based on variables like Perceived Usefulness (PU), Perceived Ease of Use (PEU), attitude towards use, intention to use and actual use. Some researchers have also integrated TAM with initial trust, reliability and customer service; 2) Innovation Diffusion Theory, which uses relative advantage, compatibility, complexity, trialability and communicability of technology as the basis for understanding buying intentions; 3) Motivational Models that used psychological, product related, service excellence oriented, economic, social and other exogenous motivations to explain online consumer behavior; 4) Social Cognitive Theory that relies on the environment, cognition and behavior to gauge buying intentions; 5) Unified Theory of Acceptance and Use of Technology (UTAUT) model, which proposes performance expectancy, effort expectancy, social influence and facilitating conditions as the determinants of the intention to use ecommerce; 6) Expectation Confirmation/Disconfirmation Model (ECM), which holds that the user experience of satisfaction or dissatisfaction in relation to their expectations as the determinants of whether they would continue to shop online, and 7) Model of Intention, Adoption and Continuance (MIAC), which

considers ecommerce adoption and its continued use as connected processes that depend upon mediating factors such as trust and satisfaction (Mamta, Mohammad and Anuja,. 2015).

The timeline of the origins of these models help in associating them with the evolutionary process of ecommerce research. The literature review by Sunanya and Baljinder includes a chronology of the development of some of the above mentioned models/theories: 1960 - Inovation Diffusion theory by Everett Roger; 1975 - Theory of Reasoned Action by Ajzen and Fishbein; 1985 - Theory of Planned Behaviour by Ajzen; 1986 - Social Cognitive Theory by Bandura; 1991 - The Model of PC Utilization by Thompson et al; 2000 - The Motivation Model by Davis et al; 2002 - Extended Theory of Acceptance and Use of Technology (UTAUT) model by Venkatesh and Davis, and 2003. Unified

While the above research models help answer the technical cum investment question of why consumers would use or not use ecommerce, they do not answer the commercial questions such as what would sell more online or what online stores could do to increase their online sales. These questions are more important and relevant in the new environment of open competition between offline and online stores jointly and severally. As a result, the research focus has shifted from technology adoption to ecommerce adoption. In a comprehensive review of 63 papers extracted from the Scopus ® database, covering the period 2011 to 2016, Vivian et al. observe that the most dominant theme of research was on ecommerce adoption using the TOE model in which Technology, Organizational and Environmental factors determine the outcomes. However, TOE model based research constituted only 21.9% of the total, while nearly one fourth (24.7%) of the papers did not use any of the legacy models. In addition, 11% of the research was based on self-developed models. There were only one or two papers per legacy model (Vivian, Aidi, and Ram, 2018).

The last five years has been transformational for ecommerce. The main factors behind this transformation are 1) smartphones with significant base memory, high quality graphical capabilities and 4G Internet connectivity and 2) digital wallets that drove away the fear of remote payments and forced banks to upgrade their online banking interfaces.

Although many researchers still continue to use legacy models of ecommerce adoption or their adaptations or extensions, the rising share of ecommerce in overall retail during the latter half of the last decade has shifted the research focus onto the competition among online stores and vis a vis physical stores. A recent research by Svatosova focuses on the strategic management of ecommerce competitiveness. This study found 15 parameters such as wider range of products, ecommerce security, e-shop credibility, online visualization of products and product descriptions, Internet payment systems, intensity of interactive communications with the consumer, method and speed of delivery, added value to purchases, unlimited time of purchase, product reference, lower price of products and services, web design, references about e-shop, e-shop certification and multichannel sale to be relevant for ecommerce competitiveness (Svatosova, 2020), This study, however, analyzed and validated these parameters based on data collected from ecommerce enterprises and not consumers.

The present study is based on the belief that it is time to treat ecommerce as an alternative channel that is competing with the physical retail channel and more so in the context of Covid19 lockdowns when ecommerce stores indeed served as substitutes for physical stores. Online stores are not only competing among themselves but also their physical counterparts to attract the very same customers who alone have the power to decide on the channel for their purchases. While the popular theory of 4Ps of marketing conceptualized in 1960 by Jerome McCarthy has been used for long to attract customers to physical retail stores, the consumer centric 4Cs theory proposed Bob Lauterborn in 1990 appears to be more appropriate in the new environment in which channel choice comes before store choice. Ecommerce has liberated the customers from the restrictive environment of physical stores, their products, prices, places and promotions and empowered them with the freedom to shop anywhere, anytime. (Ghayath, 2020). The 4C tenets of customer value, cost, and convenience establish both a rational and emotional connection with the prospective consumers. The applicability of the 4Cs to Indian conditions also stands validated by an analysis of store format choice - departmental stores vs shopping malls - for buying Jeans in the city of Hyderabad (Sudha and Anand, 2019). The 4Cs have also been found to be valid through an empirical study done in China, which considers the impact of 4Cs at the level of four different types of value perceptions namely, functional value, service value, social value and emotional value. The results show that customer value, convenience factor and communication are all correlated to the overall perceived value. However, in the case of cost, correlation of consumers' overall perceived value is observed only with respect to functional and emotional aspects and not with respect to service and social value perceptions (Yuan, 2020).

The present study makes an attempt to assess the perceptions and preferences of online apparel shoppers in India with reference with reference to the 4Cs. In this study, trust and brand are taken to represent consumer value, while price discounts cover the cost factor; advertising and marketing stand for communications, and convenience is included as such. Some of the salient studies dealing with each of these specific aspects were also surveyed to help in the proper framing of the survey instrument. The comprehensive literature survey on pricing strategies used in online fashion retailing by Steve et al, provided a basic understanding of the online fashion pricing practices (Steve, Iain, and Christoph, 2021). A case study based on actual data obtained from an Indian

online apparel store in 2015 not only confirms the existence of opportunistic pricing practices involving an average discount of 42.8% on list prices but also opportunistic returns by shoppers to take advantage of post purchase price drops. Expectation of post purchase price drops are also found to be the reason for the overwhelming preference for the cash on delivery option (Chaitanya, Antonio, Donald and Zhiji, 2018). While researchers present mixed findings about whether online prices are lower as compared to physical stores, they agree on the wider price dispersion in the ecommerce segment and it is also pointed out that the rate of price dispersion might be higher in the case of product categories with a larger number of online outlets. It is also hypothesized that consumers might find it difficult to compare prices across too many online stores (Wenche, 2021).

Marketing is becoming increasingly data intensive. Ecommerce platforms enable not only the collection of vast amounts of consumer data, which the e-marketers can use for devising their strategies but also dissemination of data to consumers in an interactive and personalized way, Based on a survey of 66 articles on consumer marketing strategy extracted from the Scopus ® database, covering the period 2011-21, Albérico and Ricardo provide insights into the wide ranging research on how ecommerce platforms together with the social media services are using technologies to achieve greater consumer engagement. They are using personalized profiles not only for making product recommendations but also for nudging them into making purchase decisions. They conclude that understanding consumer perspectives and needs is critical 'in ensuring the success of ecommerce businesses' (Albérico and Ricardo, 2021). Cheristena et al. in their review of literature of the e-marketing conceptual models underline the need for customer engagement right through the attraction, point of sale and post purchase processes to increase the effectiveness of e-marketing strategies. They also emphasize the need for keeping the consumers continuously engaged and be responsive to their preferences and feedbacks because of the rapidly changing technologies and business environments (Cheristena, Efosa, Phoebe, Mahesh and Shelley, 2016).

How a brand is perceived or recognized depends on the convergence of heterogeneous factors that create a composite brand identity (Conti, Mazzola, Motta, and Pillan, 2020). Within the 4Cs framework, brands play a twin role. Brands on the one hand, provide social and emotional value that are integral parts of consumer value. On the other hand, they also serve as instruments of communication and convey the message of quality and superiority. Preference for branded apparels is also reported in a study of apparel consumers in Mumbai and Navi Mumbai (Sandeep, 2018). Another study conducted in the city of Mawana also reports that consumers preferred branded clothes regardless of price (Neelam, 2016).

III. Materials andMethods

Study Design: The study was designed to be descriptive, exploratory and explanatory based on survey based data collection. Shopping preferences and behavior related data.

Study Location: The study was done in Delhi University College and the survey questionnaire was sent online through Google forms.

Study Duration: The study was during 2021-2022.

Sample size: The study used a convenient sample of 105 respondents comprising the students and faculty members of the College and acquaintances, which was considered as a representative microcosm of online apparel shoppers in Delhi.

Period of Data Collection: Data was collected during September and October, 2021.

Questionnaire Design: Two sets of 5 point Likert scale questions were developed, pilot tested and administered using the convenient sampling method. The first set of 26 Likert scale questions related to the perceptions and preferences of online apparel shoppers. The second set of 6 Likert scale questions related to the online apparel buying behavior of the respondents during the Covid19 lockdown period.

In addition, the survey instrument also collected demographic information such as gender, age, education level, income level, value and frequency of online apparel purchases and the extent of smartphone use for online shopping.

Profile of the Sample Population: The gender wise distribution of respondents was 70% females and 30% males. Age group wise 80 belonged 18 to 24 group while 20 were from the 25 to 34 group and 5 from the above 34 group. 94% were graduates or post graduates.

Research Methodology: Factor Analysis was chosen as the method for analyzing the data because of the various procedures and parameters it provides for deciding on the number of factors to be extracted, extracting the factors and intuitively interpreting the extracted factors. The statistical software package JASP (version 16.i) was used for doing the factor analysis.

IV. Results and Discussion

Consumer Perceptions & Preferences towards Online Apparel Shopping

Responses to 26 Likert scale questions relating to online apparel shopping perceptions and preferences were included in this factor analysis. The KMO test returned a value of 8.42, which is considered meritorious. The Bartlett's test also confirmed the suitability of this data for factor analysis by returning a value of <.001which is far less than the prescribed cut off of <0.05. Five factors were extracted on the basis of the Scree Plot. Extraction was done based on Correlation Matrix using maximum likelihood as the estimation method. Orthogonal rotation using the Varimax procedure was adopted to ensure that the extracted factors were not correlated among themselves. The validity of the factors – five in all, was confirmed by the Chi Square test showing a P value of <001, which is far lower than the cut off of 0.05. The Factor Characteristics (Table 1.1) was analyzed to understand the relative importance of the extracted factors based on the variance explained by each in the unrotated and rotated solutions.

Table 1.1 Factor Characteristics

	Unrotated solution			**Rotated solution**		
	SumSq. Loadings	**Proportion var.**	**Cumulative**	**SumSq. Loadings**	**Proportion var.**	**Cumulative**
Factor 1	8.714	0.335	0.335	3.987	0.153	0.153
Factor 2	2.096	0.081	0.416	2.946	0.113	0.267
Factor 3	1.460	0.056	0.472	2.871	0.110	0.377
Factor 4	1.062	0.041	0.513	2.130	0.082	0.459
Factor 5	0.791	0.030	0.543	2.129	0.082	0.541

Source: Author's calculations based on primary data

The Factor Characteristics table shows that the 5 factors extracted by the procedure explained 54.3% and 54.1% of the variance in the data in the unrotated and rotated solutions respectively. The remaining variation is accounted for by the some unique variables and uniqueness in the variables that loaded onto the extracted factors. Factor 1 is the strongest among all the factors. It explains 61.7% of the variance in the explained by the extracted factors in the unrotated solution and 28.3% in the rotated solution. The next two factors are also strong in the rotated solution explaining 20.8% and 20.3% of the variation respectively. The last two factors, however, explain a smaller degree of variation of only 15.2% each. The information provided by the factor characteristics table thus is very useful for correctly interpreting the relative strength of the extracted fabrics.

Interpretation and naming of the extracted factors was done based on the relative strength with which the concerned variables load onto a factor. As per the recommended best practice, a cut-off point of 0.4 was set as the minimum loading required for a variable's inclusion in any factor. Table 1.2 provides the details of the variables loading onto the five factors.

Table 1.2 Factor Loadings of Online Apparel Shopping Perceptions & Preferences

Factors	**1**	**2**	**3**	**4**	**5**	**Uniqueness**
Trust Factor						
I trust online apparel stores that provide accurate product images and detailed information	0.836					0.163
I trust online apparel stores that have easy return policies	0.705					0.445
I trust online apparel stores that provide efficient customer service and dispute resolution	0.631					0.418
I believe that digital marketing is an important way of promoting online apparel stores (M)	0.599					0.471
I found online stores ideal alternative for shopping clothes during the Covid-19 lockdowns (L)	0.531					0.490
I prefer to buy latest styles of clothes than branded clothes (B)	0.478			0.428		0.507
Online apparel stores are convenient for shopping as they save time and travel I	0.453				0.520	0.366
I find it difficult to rely only on advertisements to select online apparel stores (M)	0.446					0.749
I trust online clothing stores, which provide cash-on-delivery option	0.432					0.736
Home delivery provided by online apparel stores make them very convenient for shopping	0.424				0.691	0.285
Price & Discounts Factor						
I buy more from online apparel stores that offer attractive cash back		0.922				0.055
I buy more from online apparel stores which offer lower than the physical stores		0.656				0.406

I shop for clothes more during the mega sales events of online stores		0.590				0.436
My online shopping for clothes depend on the level of discounts offered		0.489				0.601
Brand Factor						
I prefer to buy clothes from well-established brands than lesser-known clothing brands			0.846			0.267
I rely more on the brand reputation of the online store for buying clothes online			0.766			0.329
I believe brands indicate better quality of clothing			0.615			0.434
I believe that the online apparel stores offer better collection of branded clothes than the physical stores			0.516			0.550
*I prefer to buy latest styles of clothes than branded clothes (B)						
Online apparel stores make it easier to compare price and quality of clothes from multiple sellers (C)			0.420			0.586
Marketing & Advertising						
I buy from online apparel stores that are promoted through emails and websites				0.778		0.348
I buy from online apparel stores that are popular and well-advertised				0.588		0.493
I also buy from independent online apparel who promote their websites through the social media				0.540		0.667
Convenience Factor						
Online apparel stores provided a convenient option for buying clothes during Covid-19 lockdowns					0.710	0.305
*Online apparel stores are convenient for shopping as they save time and travel	0.453				0.520	0.366
The wide variety of clothes offered by online apparel stores make shopping very convenient	0.501	0.378				
Unique Variables						
I prefer to shop from the online stores of the retail stores from where I usually shop otherwise						0.794
I find most online apparel stores trustworthy						0.656

Source: Author's calculations based on primary data

The following is the interpretation of the five factors and the variable, which load onto them:

1. *The Trust & Expectations Factor***:** Going by the strength of the variable loadings, accurate product details, easy return policies, and efficient customer service and dispute resolution along with effective digital marketing can be considered as the four cornerstones of the trust factor. The fifth variable confirms that the consumers did trust the online apparel stores to provide an 'ideal alternative for shopping clothes' during the Covid19 lockdowns. The second group of five variables loading onto this factor with weaker loadings of less than .5 are indicative of consumers' expectations from the online apparel stores such as the availability of latest styles and not just branded clothes; saving of money and time; trust worthy shopping experiences and not just advertisements; cash on delivery and home delivery options. Three of these variables have cross loadings on other factors while the rest two have higher degree of uniqueness. The first variable in this group referring to the preference for latest styles cross loads on to the marketing factor implying thereby that latest styles is a pull factor and advertisements focused on the styles are likely to attract more customers. The next variable regarding the saving of money and time has a stronger loading on the convenience factor indicating that the saving of money and time is a convenience, which the consumers expect from the stores they trust. The next two variables regarding 1) the reluctance of the consumers to develop trust based only advertisements and 2) the availability of cash on delivery options have a uniqueness value of over 0.7 leading to the conclusion that these are important considerations by themselves despite being relevant to trust formation. The last variable in this group relating to home delivery, however, loads more strongly onto the convenience factor. It may be said that the convenience of home delivery offered by online apparel stores is also relevant for creating trust in the minds of the consumer.
2. *Price & Discounts Factor***:** The second factor explains 20.8% variance in all the extracted factors and is formed by four variables directly related to prices and discounts. The lead variable is cash back with a strong loading of .922. The next variable (.655) refers to the lower prices that online apparel stores offer as compared to offline stores. The next variable (.59) indicates the preference for buying clothes more during the mega sales The fourth variable relating to the level of discounts has a weak loading of .489 with a uniqueness of .601 indicating that this variable by itself could attract online shoppers whose 'online shopping for clothes depend on the level of discounts offered.'
3. *Brand Factor***:** This factor explains 20.3% of the variance explained by all the extracted factors. 4 out of the 5 variables that load onto this factor directly relate to brands. The lead variable (.846) relates to the preference for buying clothes 'from well-established brands rather than lesser-known' ones. The next variable (.766)

relates to the reliance on 'the brand reputation of the online store'. These do confirm that consumers are influenced by their perceptions about both clothing and online store brands. The third variable (.615) affirms their belief that 'brands indicate better quality of clothing.' The fourth variable (.516) indicates that better collections of branded clothes than the physical stores will influence how the consumers perceive the online store brand. The last variable (.420) relates to the proposition that 'online apparel stores make it easier to compare price and quality of clothes from multiple sellers.' Its loading on the brand factor implies that consumers consider price and quality to be more relevant to branded clothes.

4. *The Marketing Factor*: This factor, which explains 15.2% of the variance explained all the 5 factors, is made up of three variables that directly relate to marketing and advertising loading significantly with values over .5. The lead variable (.778) is concerned with the influence of emails and websites based online apparel store promotion. The next variable (.588) relates to the influence of store popularity and advertisements. The third variable (.540) confirms the role of social media in promoting independent online apparel stores.
5. *The Convenience Factor*: This factor is composed of four variables with a loading of over .5 each and explains 15.2% of the variance in the data set in the rotated solution. All the four variables direly relate to convenience group predefined in the survey instrument. The lead variable (.710) is the proposition that the online apparel stores 'provided a convenient option for buying clothes during Covid-19 lockdowns'. The second variable (.691) confirms that home delivery make online stores 'very convenient for shopping'. Though this variable cross loaded on the Trust Factor, its loading on the convenience factor is significant with a value of .691. The third variable (.520) that loaded onto the convenience factor with a significant loading of .520. The last variable that loaded on to this factor is the proposition that the 'wide variety of clothes offered by online apparel stores make shopping very convenient.' The factor loading in this case was .501. The cross loading of two variable on to the trust factor does imply that shoppers have begun to trust that online apparel stores do make shopping convenient.

Analysis of Uniqueness

The variables that do not load onto any factor as well as the level of uniqueness in the variables that loaded onto the extracted factors need to be considered to fully understand the variance in the data. The preference for shopping from online stores of favorite offline stores (.794) and the general proposition that most online stores are trustworthy (.656) are significantly influential on their own. Even among the variables that loaded onto the extracted factors, 1) the preference for latest styles than branded clothes (.507), 2) the reluctance to rely only advertisements (.749), 3) the availability of cash on delivery option (.736), 4) the level of discounts offered (.601), 5) the belief that online stores have better collection of brands (.550), 6) the belief that online stores are better for comparing price and quality of clothes (.586), and 6) the preference for buying from independent online stores promoted through social media (.667) have an uniqueness of more than .5 suggesting their significant role in explaining the overall variance in the data outside of the five factors which explain a little over 54% of the variance in the data. Their extra influence also needs to be borne in mind while interpreting the results of the data. The impact of these variables would also need to be further explored through additional research.

Consumer Behavior during Covid19 Lockdowns

Exploratory factor analysis of the responses relating to the six Likert scale questions concerning the purchase behavior of online apparel shoppers during Covid19 lockdowns was performed to identify possible correlations among these. The KMO test yielded a result of .786, which is close to .8 which qualifies as meritorious data for carrying out factor analysis. The result of the Bartlett's test was well below cut-off of 0.05 with a P value of < .001.

Exploratory factor analysis was done using an Eigen value of more than one as the cut-off using the correlation matrix based on maximum likelihood and Varimax rotation. The procedure produced two factors with the following factor characteristics:

Table 2.1: Factor Characteristics

	Unrotated solution			**Rotated solution**		
	SumSq. Loadings	**Proportion var.**	**Cumulative**	**SumSq. Loadings**	**Proportion var.**	**Cumulative**
Factor 1	2.733	0.455	0.455	1.955	0.326	0.326
Factor 2	0.748	0.125	0.580	1.522	0.254	0.580

Source: Author's calculations based on primary data

The extracted factors explained 58% of the variation in the response data with the first explaining 78.5% of the variance explained by the extracted factors under the unrotated solution 56.2% of the variance in the rotated

solution. Factor 2 explained the balance of 21.5% in unrotated solution 43.8% of the rotated solution. The extracted factors had no inter-correlations. The factor loadings are given in the table below:

Table 2.2: Behavioral Factors during Lockdowns**.**

Factor	**1**	**2**	**Uniqueness**
Attraction Factor			
Heavy price discounts offered by online apparel stores during the Covid-19 lockdowns motivated my online purchase of clothes	0.810		0.325
I became aware of the advantages of buying apparel from online stores during the Covid19 lockdowns	0.702		0.439
I bought clothes online during the Covid-19 lockdowns just to fulfill the pent-up desire for shopping	0.673		0.492
Compulsion Factor			
I bought clothes from online stores during lockdown since access to physical stores was limited	0.509	0.531	0.458
While buying from online stores during the Covid-19 lockdowns, I missed the pleasure of shopping from physical apparel stores		0.901	0.177
Uncertainties about overall family income restricted my online apparel shopping during the Covid-19 lockdowns		0.534	0.632

Source: Author's calculations based on primary data

While the first and the second factor are composed of 3 and 2 variables which respectively loaded onto these factors exclusively, one of the variables cross loaded on both almost with equal strength. The interpretation and naming of the extracted factors have been done as under:

1. *Attraction Factor:* The lead variable loading onto the first factor is 'heavy price discounts offered by online apparel stores during the Covid-19 lockdowns (.810) followed by the affirmation that they 'became aware of the advantages of buying apparel from online stores during the Covid19 lockdowns (.702). Both these variables indicate the attraction that online apparel stores provided to both the old and new online apparel shoppers. The third variable may also be considered as an attraction provided by the online apparel stores to shop more and release the pent up desire for apparel shopping. The fourth variable has a significant loading on both the first and second factors. In the context of the first factor, the influence of this variable needs to be interpreted differently. It appears that some consumers naturally turned towards online apparel shopping as it provided an effective alternative to physical stores that remained closed during the lockdowns.
2. *Compulsion Factor*: This factor brings out the fact that not all consumers were naturally attracted to online apparel stores. The lead variable confirms that they missed 'the pleasure of shopping from physical apparel stores during the lockdowns' (.901). The next variable, affirms that 'uncertainties about overall family income restricted online apparel shopping during the lockdowns.' While this variable has loading of .534 on to this factor, it also exhibits a more significant level of uniqueness (.632). We may therefore treat it as a variable having a moderate influence on this factor. The third variable (.531) cross loaded onto the first factor. In the context of this factor, this variable needs to be interpreted differently. Together with the lead variable which affirms that the respondents missed the joy of shopping from physical store, it only means that they took to online apparel shopping only because they did not have access to the physical stores during lockdowns.

V. Conclusion

The results of the factor analysis of the online apparel shopping perceptions and preferences confirms the relevance of Lauterbam's 4 Cs theory of marketing mix to apparel ecommerce in India. The factors extracted not only correspond to the 4Cs more or less but also provides insights that help update our understanding of each of its components in the contemporary context of Indian apparel ecommerce. This study reveals that in the minds of the Indian online apparel shoppers, trust epitomizes their perception of customer value. Trust emerges as a composite factor engendered predominantly by the integrity of the online outlet in i) providing product details, ii) facilitating easy returns, iii) efficient customer service and dispute resolution and to a lesser extent by its capacity to meet customer expectations with respect to latest styles, saving of money and time, cash on delivery and home delivery. While digital marketing helps in building trust, consumers are not ready to rely only on advertisements. Price and discounts govern their perception of cost in which cashbacks and lower prices relative to the physical stores play dominant roles. This perception is confirmed by their inclination to shop more during mega sales and generally to look for price discounts. Their perception of communication is a two sided phenomenon with the focus on brand on the one side and advertising and marketing on the other. The brand perception is largely influenced by both apparel brands and online apparel store brands. Quality in their view is a key requirement of apparel brands while the size of brand collections influence their perception of online store brands. In the consumers' perception of advertisement and marketing based communications, personalised promotions has a larger role while the overall popularity and advertisements is also important. Social media seems particularly

important for independent online apparel stores. Consumers' perception of the convenience component revolves around the capacity of online apparel stores to save their time and money and offer a wider variety of clothes to choose from. The strong assertion made by the respondents of this survey that the online apparel stores provided a convenient option for buying clothes during the Covid19 lockdowns clearly indicate a paradigm shift in consumer perceptions. This shows that apparel ecommerce has emerged as an alternative for physical stores, breaching barriers of technology adoption and financial risk perceptions.

Going by the extent to which the five factors explain the variance in the overall response data, it can be safely concluded that the sweet-spot in the consumer preferences relating to online apparel stores is a triangular space with a broad base of trust and enclosed by the price and discounts factor on the one side and the brand factor on the other. Advertisement and Marketing as well as convenience are necessary, but these do not seem sufficient for causing a buying decision. The most important finding that this study offers to online apparel stores is the absolute need to focus on the integrity in presenting products and providing customer service.

The factor analysis performed on the apparel consumer behaviour during Covid19 lockdowns explains why India and apparel ecommerce were found to be exceptions to the conclusions of the IMF study, which declared that that the more than normal shift towards B2C ecommerce during the Covid19 lockdowns as transitory. A key finding of the present study is that Indian consumers became aware of the advantages of buying apparel from online stores during the Covid19 lockdowns. To a pointed question about their level of online purchase of apparel in future, only 8.7% of the respondents expected their online purchase of apparel to go down after the lockdown.

VI. Limitations of the study and scope for further research

This study is based on a limited convenient sample of people in Delhi. The findings of the study must be used with caution in the case of general population whose demographic profile may be different. The factor analysis shows that 9 out of the 26 variables had a uniqueness value of more than .5. Two of these variables did not load on to any of the extracted factors. These are ideal candidates for more focused research.

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