

## **ANALYZING THE PROBLEMS FACED BY FASHION RETAIL STORES DUE TO COVID-19 OUTBREAK**

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### **ABSTRACT**

COVID-19 pandemic has changed the operations of many industries. The retail sectors are facing lots of challenges which arise due to the pandemic. Customers visiting the stores have declined, purchase power has decreased and demand of the products also decreased which in turn have led to lower sale of the clothes and fashion products. The objective of this research is to identify the challenges faced by the fashion retail store due to the pandemic. For this, a structured literature review is performed to identify the challenges that the fashion retail store is currently facing.

or was facing during the lockdown. The challenges identified are mainly communication problems, safety and security, poor infrastructure, lack of medical facilities. A questionnaire is developed for a survey based research across the various fashion retail outlets. For the data analysis exploratory factor analysis and structural equation modeling is performed. The model developed showed a good fit and the entire proposed hypothesis is being accepted.

**Keywords:** COVID-19; Fashion Retail Outlets; Structural Equation Modeling; Challenges; Survey

## 1. Introduction

The pandemic which happens because of COVID-19 (COV19) had radically changed the operational execution of various industrial sectors which incorporates manufacturer, retailers, and purchasers. The fashion industry and apparel face numerous difficulties in stock, supply chain (SC), conveying, and keeping their office in a protected environment. Despite the fact that apparel is considered as unnecessary merchandise they face numerous huge difficulties and drop in demands (Armani et al. 2020). The profoundly dangerous COV19 infection was announced as a worldwide pandemic by the World Health Organization on 11 March 2020. In spite of the fact that its precise inceptions are obscure (Araz et al., 2020). COV19 mortality has been more normal in more established grown-ups and those with previous ailments. The tasks of numerous associations have been seriously disturbed as the flare-up spread far and wide, affecting both market interest (Ivanov 2020). The uncommon idea of the pandemic has

implied that organizations had no plans or arrangements to deal with this situation in the markets (Zhou et al. 2020a). The fashion industry has been liable to key dangers that have regularly been acknowledged, for example, late conveyances, long lead time for delivery among returns and reverse logistics to clients, stock-out, and conveyances in the single arrangements. Because of the COV19 flare-up, amidst the pandemic with the nations differing in the techniques and the ability in containing the infection, social distancing among the populations and lock-down by the governments (Zhou et al. 2020b). The apparel industries mainly manufacture their products in the developing countries of South Asia to cut the cost of labor and production (Teodoro and Rodriguez 2020). But the countries like China from where maximum raw materials are being sourced in the developing countries (Aung and Paul 2020). When China implemented lockdown, the global SC suffered a lot as there were fewer inventories of the raw materials. All the international borders as well as sea ports were

closed down. So the garments industry was not able to produce nor were they able to sell the produced products. Clothes are worn according to seasons in India so the sector suffered heavy losses during the lockdown. And after the lockdown got over customers were afraid in visiting the retail stores and also the purchasing power of the customers decreased due to job losses and salary cut in various sectors.

The objective of this paper is to identify the problems that are being faced by the fashion retail stores across India. For these four challenges has been identified from the literature to carry out this research work.

## **2. Literature Review**

### **2.1. COVID-19 impact on Fashion Retail stores**

The year 2020 saw many disruptions due to COVID-19 and global SC faced a lot of problem in coping up with the circumstances. Fortune 100 companies in the world reported disruptions in SC due to COVID-19 (Teodoro and Rodriguez 2020). A simulation based research had been executed in the global SC to find out the impact on the performance of SC during COVID-19 outbreak (Ivanov, 2020). COVID-19 has likewise been believed to cause synchronous aggravations in the market, where changing shopper requests and ensuing request abrogations protractedly affect the SC (Teodoro and Rodriguez 2020). It had been found that customer spending in Denmark saw a total decline of 27% in the seventh week following the

lockdown. Low-lead time technique conveyed inside the quick SC is, to a limited extent, subordinate to suspicions about purchaser interest. As the declining financial conditions in the interest for trivial merchandise, numerous organizations have been closing down (Andersen et al., 2020).

This is on the grounds that store terminations have prompted a stockpile, additionally, the summer assortment is still to be come out over a more drawn period and the creation of the fall-winter assortment has not yet to be begun (McMaster et al., 2020). Contingent on every one of these components, numerous brands began following some new procedures. Many fashion retail stores are taking to relieve misfortunes due to revising rents, support of stores, and using the extra stock. To conquer these misfortunes, the organizations like Raymond viably deals with the liquidity with an expanded spotlight on installment the acknowledgment of the market (Shen and Chen 2019). Expanded item deals, Raymond dispatched its web-based fitting activity; the organization wants to scale this up (Li et al., 2020).

The international brand like Nike drove a solid computerized promoting effort as the reaction to the negative interest hit to its store and furthermore to draw in their client across the globe, with the goal that their advanced trade stays open and furthermore in development mode, get upheld by their bosses and their conveyance communities (Ivanov,

D. 2020). Despite the fact that the brands are showcasing their business on computerized stages, they face numerous difficulties in dealing with the actual store as wellbeing is exceptionally organized by the client. Some style brand like Jockey has said no trails or exchanges (Subashini et al., 2020).

## **2.2. Research Framework and Hypothesis Development**

The challenges faced by the fashion retail stores due to COV19 outbreak:

**2.2.1 Communication Problems (COM):** Because of miscommunication of lockdown, the truck carrying conveying products stalls out in someplace that influenced the basic necessities of buyers. In India, it was accounted for that because of an absence of data trade, police and neighborhood specialists are compelling retailers for closing down the stores. It had been referenced that during the pestilence, compelling correspondence about everything likes indications, reason for diseases, lockdown periods, the inventory of basic products, and so forth, is basic for controlling the flare-up (Lau et al., 2020).

H1: COM influences COV19C in fashion retail store

**2.2.2 Safety and security (SS):** A larger part of these basic representatives will keep on working their work in clinical offices, retail locations, water administrations, and different working environments all to guarantee that

the remainder of society will hold a specific feeling of a solid life during this episode (Kumar et al., 2020).

As retail staffs are at the bleeding edge, which will puts them at steady danger for diseases. Security and wellbeing of laborers and associations (Lau et al., 2020). It is the duty of the public authority to give them security as they are battling for countries.

H2: SS influences COV19C in fashion retail store

**2.2.3. Poor Infrastructure (PI):** Retail locations are for the most part intended for sound and stable working condition with restricted assets. After the presentation of the idea in the just of time (JIT), not many retail locations kept additional stock. The absence of adaptable stockpiling limit is making more issues, the same number of wholesalers is attempting to upsurge the inventory, however because of limit imperatives, and the inventory is as yet restricted (Vader et al., 2020). A truck bringing an acquirement of merchandise goes through a fixed course and can't change in the middle of according to necessity.

H3: PI influences COV19C in fashion retail store

**2.2.4. Lack of medical facilities (MF):** During a pandemic, the accessibility of clinical offices at the retail location is a major concern (Chopra and Sodhi, 2004). As COV19 is spreading through human contact, it is important to give essential clinical offices like sanitizers for laborers at work (Ivanov and Dolgui, 2020). According to a

report distributed by it was informed to expand the assembling concerning covers and other clinical extras by 40% to satisfy the worldwide need.

H4: MF influences COV19C in fashion retail store

### 3. Research Methodology

#### 3.1. Sampling

Responses were collected through a structured questionnaire from the retail managers, operation manager, departmental manager and the store manager of the various fashion retail stores. The sample was selected from each strata through the technique of Stratified Random Sampling method as it allows population harmony from the sub population (Hair et al. 2010). The questionnaires were sent to 496 respondents, but only 319 respondents returned usable questionnaires, valid for analysis. To avoid common method, bias the research team has taken few fundamental precautions during the pre-data collection stage. A note was mentioned on the beginning of the questionnaire that indicated the survey is intended for academic research and confidentiality of data will be maintained. The data is collected the research team applied Harman's single factor test. Exploratory factor analysis was performed, and the results show that first factor explains maximum variance (24.348%) which is below recommended value of 50% (Podsakoff et al., 2003).

#### 3.2. Demographics of the respondents

Leedy and Ormrod (2014) stated that a cross-sectional plan includes testing

and looking at individuals from a few diverse segment gatherings. This methodology empowers the specialist to gather the basic information simultaneously.

The table Ibelow shows the demographics of the respondents. A questionnaire method was used. Respondent's characteristics for gender 57% were male respondents followed by 43% female respondents. Respondents current position were 29% were store manager followed by 27% operation manager followed by 23% retail manager followed by 21% store manager.

Table I: Demographics of the Respondents

SN	Characteristics	Percentage
I	Gender	
A	Male	57
B	Female	43
II	Respondents current Position	
A	Retail manager	23
B	Operation manager	27
C	Departmental manager	21
D	Store manager	29

### 4. Data Analysis

#### 4.1. Reliability and Validity

##### 4.1.1. Cronbach's Alpha

The reliability test was performed for each factor based on cronbach's alpha ( $\alpha$ ) value introduces cronbach's alpha for the constructs. The values of all indicators or dimensional scales

should be above the recommended value of 0.70 (Nunnally and Bernstein, 1994). Utilization of 7 points Likert scale was done in preparing the structured questionnaire. Hence, all the values are within the threshold as shown in the table II.

#### 4.2. Exploratory Factor Analysis

The first step of the EFA was to evaluate the appropriateness of the sample size. SPSS 20.0 was utilized for EFA. The correlations between its items had been inspected utilizing the Bartlett's test of sphericity (Hair et al. 2010). Principal axis factoring was performed to identify meaningful bias and express the same qualities. KMO value for the current research is 0.745. The minimum level set for this statistic is 0.60 (Hair, et. al., 2010). The significance value is 0.000, which is less than 0.05, i.e., the probability value level acceptable. The extraction method used was principal axis factoring. Only the eigenvalues which have values greater than one were extracted as it explains maximum variance. For the components, the percentage of total variance explained by component 1 (28.617%), component 2 (20.038%), components 3 (13.687), and component 4 (11.395%). The cumulative percentage of total variance explained by all three components is 73.737%.

The Rotated Component Matrix is important for interpreting the results of the analysis. Rotation helps in grouping the items, and each group contains more than two items at-least, which simplifies the structure.

Hence, this is the aim of the goal of rotation. In this research, we have achieved this aim. There are 12 total variables which were grouped under four different components as shown in the table II

Table II: Cronbach's alpha, Composite reliability, Rotated Component Matrix

Latent Variable	Indicators	Cronbach's alpha ( $\alpha$ )	Composite reliability (CR)	Rotated Component Matrix
COM	COM1	0.726	0.856	.831
	COM2			.860
	COM3			.703
SS	SS1	0.744	0.856	.795
	SS2			.820
	SS3			.830
PI	PI1	0.885	0.928	.882
	PI2			.922
	PI3			.898
MF	MF1	0.849	0.904	.826
	MF2			.949
	MF3			.833

#### 4.3. Construct Validity (CV)

A significant logical idea to assess the validity of a measure to develop a CV. CV is the degree to which a test quantifies the idea or develop that it is expected to quantify. CV is generally tried by estimating the relationship in appraisals got from a few scales.

There is no cut-off that characterizes CV (DeVellis 2003).

#### 4.3.1. Convergent validity

It is measured with the help of average variance extracted (AVE). As per Fornell and Larcker (1981), AVE >0.5 for the convergent validity. Table III represents AVE values for the constructs. All the values are greater than 0.5 which satisfies convergent validity for all the constructs.

#### 4.3.2 Divergent or Discriminant validity

To evaluate this validity, Fornell and Larcker (1981) suggested that AVE of the construct should be more than the square of the correlation between that construct and the other constructs. Table III represents the values for construct correlation and AVE. The variance extracted and squared correlation for PI and MF is 0.783 and 0.176; PI and SS is 0.737 and 0.001; PI and COM is 0.724 and 0.0002; MF and SS is 0.710 and 0.004; MF and COM is 0.696 and 0.00002; SS and COM is 0.650 and 0.036, hence, the value of variance extracted is more than squared correlation value. As a result,

divergent or discriminant validity is satisfied.

#### 4.4. Structural Equation Modeling

To test the hypothesis, SEM was used (Byrne, 2010). AMOS 22.0 was utilized for this research because of its powerful graphic representations and user-friendly interfaces. The results of the model are shown here. Figure I represent the final model and the latent variables and their indicators and dependent variable. There are three latent variables. The latent variables along with its indicators are: PI: Poor Infrastructure has three indicators PI1, PI2, and PI3; MF: Lack of medical facilities has three indicators MF1, MF2, and MF3; SS: Safety and security has three indicators SS1, SS2, and SS3; COM: Communication Problems has three indicators COM1, COM2, and COM3. One dependent variable is COV19C: COVID19 Challenges in Fashion Retail Store which has four indicators COV19C1, COV19C2, COV19C3, and COV19C4.

The value of chi-square is 185.579, and the degree of freedom is 94. The estimations of absolute fit indices are:

Table III. Construct correlation and AVE

	AVE	Variance Extracted Between Factors			
		PI	MF	SS	COM
PI	0.901	1			
MF	0.869	0.783	1		
SS	0.815	0.737	0.710	1	
COM	0.798	0.724	0.696	0.65	1



CMIN/Df 1.974, CMIN represents the chi-square value, and Df represents the degree of freedom, and the value is less than 3, which is the accepted threshold value. The root mean square approximation (RMSEA) is 0.055; comparative fit index (CFI) is 0.956; Tucker-Lewis coefficient (TLI) is 0.944; goodness of fit index (GFI) is 0.933; adjusted goodness of fit indices (AGFI) is 0.903; normed fit index (NFI) is 0.915, and incremental fit index (IFI) is 0.956 are having values in the threshold level and is acceptable (Byrne 2010).

## 5. Discussion

The objective of this research is to identifying the challenges that were being faced by the fashion retail outlets due COV19 outbreak. As we all know the pandemic had changed the structure of many industries and many

industries got closed also. Fashion retail outlets were closed during the lockdown and after the lockdown when it got opened the purchase of the customer got decreased. The demand of the customers changed a lot due to this pandemic. The Cronbach's alpha and composite reliability values for the four latent variables were above 0.7, which is the recommended level (Nunnally 1978; Hair et. al. 2010). The KMO value of the construct is 0.745, which is also above the recommended level of 0.6 (Hair et. al. 2010), which allows the data for factor analysis. The total variance explained was 73.737%, and in the rotated component matrix, the variables were grouped under four groups. Only the loadings which are above |.40| are considered in this research because those are considered to be typically high and hence are more significant (Hair et. al. 2010).

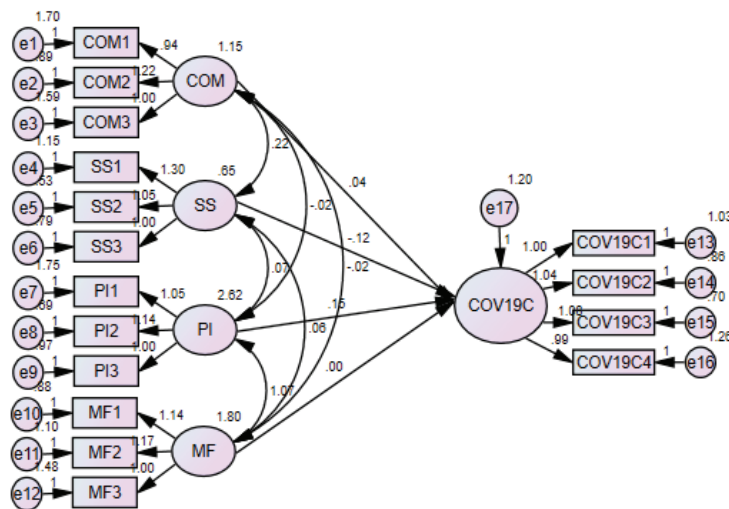


Figure I: Final measurement model



For further analysis in this research four components were utilized having 12 indicators. The component PI stands for poor infrastructure which means the facilities of the fashion retail stores available like toilets, proper sanitization facilities, and medical room. Many stores do not have proper ventilation or proper medical rooms available. Due to COVID government made certain rules and regulations for the stores that need to be strictly followed by the outlets. Proper facilities like sanitizer need to use and temperature needs to be monitored and checked before entering the outlet. It comprises of three sub-components PI1, PI2, and PI3 with values of 0.882, 0.922, and 0.898 which shows that it has very high loadings ( $>|.40|$ ). MF stands for lack of medical facilities. The government made it compulsory for the outlets or the mall to have a medical room for usage in the case of emergency situation and an ambulance needs to be parked near the mall so that if any emergency arises than the patient can be taken to the hospitals. Phone numbers of the emergency services needs to paste in the outlets for any kind of help. It comprises of three sub-components MF1, MF2, and MF3 with values of 0.826, 0.949, and 0.833 which shows that it has very high loadings ( $>|.40|$ ). SS stands for safety and security. Fashion outlets owners needs to look after the safety of their employees and needs to develop a plan accordingly. For example COVID insurance needs to be done by the employees. The shops need to be shut down and sanitize if any cases of COVID is found in the outlets

(Lau et al., 2020). Proper hygiene, cleaning, and sanitization needs to be done on daily basis. It comprises of three sub-components SS1, SS2, and SS3 with values of 0.795, 0.820, and 0.830 which shows that it has very high loadings ( $>|.40|$ ). COM stands for communication problems. Communication and information exchange needs to be proper between the fashion outlets and government organizations. It comprises of three sub-components COM1, COM2, and COM3 with values of 0.831, 0.860, and 0.703 which shows that it has very high loadings ( $>|.40|$ ).

Based on EFA, the SEM was performed in AMOS 22.0. The value of chi-square is 185.579, and the degree of freedom is 94. The estimations of absolute fit indices are: CMIN/Df 1.974, CMIN represents the chi-square value, and Df represents the degree of freedom, and the value is less than 3, which is the accepted threshold value. The root mean square approximation (RMSEA) is 0.055; comparative fit index (CFI) is 0.956; Tucker-Lewis coefficient (TLI) is 0.944; goodness of fit index (GFI) is 0.933; adjusted goodness of fit indices (AGFI) is 0.903; normed fit index (NFI) is 0.915, and incremental fit index (IFI) is 0.956 are having values in the threshold level and is acceptable (Byrne 2010).

Hence, the hypothesis H1, H2, H3, and H4, could not be rejected. In this research the components are explained and valid with the help of SEM approach which is most appropriate method to prove the validity and this

technique has not been used till date in any prior research which make it a unique research.

## 6. Conclusion

COVID19 pandemic had changed the style of operation many retail stores. Many retail store got closed due lack of customers. They are faced with lack demand among the customers as the purchase power of the customers declined. The research was conducted to find the challenges being faced by the fashion supply chain in running the fashion retail outlets. For this a structured literature review was performed to identify the challenges. After identifying the challenges the questionnaire was developed with the help of the academicians and the

industry personals. A survey based research was carried out in different fashion retail outlets of India. The target populations were mainly the retail manager, department managers, store managers and floor managers. After collecting the data for the analysis EFA and SEM was being performed. A model was developed which showed a good fit and all the proposed hypothesis were accepted.

The future research can be conducted in different sectors using these challenges and a new model can be developed. The solution needs to be found out for the problems mentioned. Further research can be extended to different countries and a comparative study can be developed.

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