



BEHAVIOURAL TURNAROUND: INVESTIGATING URBAN CONSUMPTION PATTERNS BEFORE AND AFTER COVID-19

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ABSTRACT

This study investigates how the COVID-19 pandemic reshaped urban consumer behaviour in Kerala, particularly in terms of product category preferences and shopping frequency. Based on responses from 110 participants and using paired sample t-tests and correlation analysis, significant changes were identified in the purchase patterns of groceries, clothing, health & beauty products, and household items, excluding electronics. The findings reveal a sharp rise in digital spending and online shopping frequency post-pandemic largely influenced by health concerns, mobility restrictions, and improved digital access. Demographic factors, especially age and digital literacy, played a key role in this behavioural shift. The results point to a lasting transformation in consumer habits, marked by increased trust in e-commerce and preference for convenience and safety. These insights offer practical implications for retailers, digital platforms, and policymakers to align their strategies with the evolving demands of urban consumers. Further research can explore rural trends and long-term behavioural sustainability.

KEY WORDS: COVID 19, Pandemic, Consumer Behaviour, Online-shopping, Attitudinal Changes,

1. INTRODUCTION

The COVID-19 pandemic became a disruptive event that no one could imagine: it disrupted the way of life of people all over the world, including those living in urban areas, but their experiences were very fast and transformative. One of the greatest changes was a definite and large increase in consumption pattern which was followed mainly by talks of the health measure prohibited by the state and the physical stores being closed (Donthu & Gustafsson, 2020). The consumer changing behaviours were also based on response to lockdowns, curfews, and social distancing requirements including switching shop types (moving away to online shopping and closer towards general necessities and luxury items and altering frequency and quantity of purchase (Sheth, 2020).

The movement to digital consumption was more marked in urban areas where there was greater internet penetration and use of smart phones (Bhatti et al., 2020). Electronic stores were turned into the main instrument of buying basic necessities such as foodstuffs, medication, and hygiene (Pantano et al., 2020). At the same time, the spending in the areas like travel, entertainment, and dining out decreased significantly (Wang et al., 2020). With the cloud of uncertainty, consumers have grown more economical and prefer to engage in necessity-led consumption and economic prudence (Coibion et al., 2020).

This paper aims to understand and discuss the kind and scale of such changes in consumption among the urban population because of the COVID-19 pandemic. Specific focus is offered to the way in which those changes vary, demographically, in the different areas of age, gender, income, and education level. The study examines whether these changes in consumer behaviour are temporary phenomena that correlate with the crisis situation or are related to significant long-term changes in urban consumption behaviour (Verma & Gustafsson, 2020). In addition, the research is concerned with digital platforms and consumer choices and evaluates the contribution of virtual shopping environments to post-pandemic practices. Through these trends, the studies seek to provide a reflection that would be insightful to companies, policy makers and researchers in the future need of urban consumers in a post-pandemic world.

1.1 Statement of the Problem

The COVID-19 pandemic has suddenly changed the consumer lifestyles and expenditure patterns notably in the city perspective. Blocked movement and the inaccessibility of physical stores predetermined a large-scale transition to the Internet-based style of purchasing and transactions. As necessities were prioritised, less significant



purchasing went down significantly. Such transformations raise the following questions: are all these shifts in consumption a short-term reaction to crisis or are they a long-term shift? Have the demographics reacted identically, or is a trend evident in terms of age, gender, income and lifestyle? This research investigates such issues by considering the changes in the urban consumer behaviour that occurred during and after the pandemic.

1.2 Significance

The knowledge about the changing pattern of consumption in urban settings because of COVID-19 is useful to various stakeholders. To businesses, the insights may be used to refine supply chains, marketing strategies and customer engagement strategies. To policy-makers, the research provides insight on how to set up responsive consumer protection systems and crises support systems. In the case of e-commerce, it presents evidence on how customers are shifting their expectation on convenience, safety, and availability. On the academic side, the research forms part of an emerging literature focusing on consumer behaviour within crisis conditions, supporting to provide a modern perspective according to which digital transformation and behavioural economics can be observed.

1.3 Scope of the Study

The research is based in Kerala and more precisely in large cities such as Kozhikode, Kochi, Trissur and Trivandrum. The specified cities provide diverse populations and great digital penetration, which makes them compatible with analysing the changes in consumption behaviour in three stages pre-pandemic, during the pandemic, and post-pandemic. The paper analyses consumer behaviour, consumption patterns and behaviour.

1.4 Objectives of the Study

- To assess the impact of online shopping on consumption during the Covid pandemic.
- To compare urban consumer behaviour before and after the Covid pandemic.
- To analyse demographic factors (age, gender, income) influencing consumption shifts.

Hypotheses of the Study: No significant difference exists in consumption patterns before and after the pandemic.

2. REVIEW OF LITERATURE

The COVID-19 pandemic caused massive shifts in consumer behaviour especially in the urban populations since they had access to digital infrastructure to quickly change their shopping patterns. These behavioural shifts have been the subject of extensive research (both worldwide and India-specific), yielding useful insights into how consumption patterns transformed both in the course of the pandemic and in its wake.

2.1 Global Insights

Baker et al. (2020), studied the consumer spending within the United States at the first stage of the pandemic. Their analysis showed that there has been a drastic reduction in the expenditure on non-essential products but the demand related to groceries and healthcare products has skyrocketed to show a reshuffling in the priorities of the consumer. In like manner, a study by Donthu & Gustafsson (2020) also pointed out the role played by pandemic in enhancing digital transformation. Their report found that there were considerable surges in online purchase, digital services, as well as the usage of contactless payment systems. Jonas (2013) already offered a pre-pandemic concept to comprehend the macroeconomic effects of pandemics. This point enables to note that pandemics are threats of the same nature as absolute poverty in developing countries as they frequently cause economic crises and large-scale disturbances in society. Pantano et al. (2021) discussed the reaction of retailers to the pandemic and described several innovations like contactless deliveries and increased strength of online customer interactions. In their paper, they mentioned that buyers were getting more interested in services that would provide them with a high level of safety, convenience, and expedited operations. Statista (2021-2022) reports have indicated the worldwide surge in e-commerce, and in the case of India, the online sales in groceries increased on average by 70%. It was a significant change of urban consumer behaviour.

2.2 Indian Context

Some scholars conducted research on the urban Indian reaction to COVID-19 regarding the consumption behaviour. According to the Nielsen India Report (2021), the Indian individuals, especially those in the metro cities, were shifting to digital applications during lockdowns to purchase groceries, personal care and health products. Similarly, Deloitte India (2020) indicated a procurement of basic requirements, rise of savings, and diminution of discretionary expenditure levels. Ravi & Gupta (2021) examined the urban Indian households and discovered that unstable income and job perceptions stimulated the decrease in the luxury consumption, consumption of eating out, and travel. In a similar vein, Sengupta & Jha (2021) noted that middle-income urban households changed their spending patterns according to the amount of financial burden, paying increased



attention to basic needs. According to Sharma & Mahendru (2020), the increasing level of trust in e-stores, primarily driven by better hygiene conditions and delivery services, contributed to the boost of the long-term acceptance of online purchases. According to the EY Future Consumer Index (2021), there are five post-pandemic consumer groups in urban India, and these will be markedly different in terms of their attitudes towards spending, saving and prioritizing basics. The UNCTAD Report (2020) indicated that there was a steep inclination in the extent of internet-based business in developing economies such as India, and the pace of change in the retail format was augmented in town centres. A psychological school of thought by Aggarwal & Srivastava (2021) also shined light on the fact that fear of infection instigated change in consumer behaviour towards the purchase of more packaged food and use of services that did not require physical contact. In addition, Khan & Raza (2021) have found out that online consumer behaviour during the pandemic in India is most likely to be driven by trust, safety, and convenience.

Research Gap: Although the increase of digital commerce and the change of spending priorities because of COVID-19 has been discussed constantly in the existing literature, there are still important gaps to fill. The majority of the studies dwell upon macroeconomic developments or general behaviour patterns without paying broad enough attention to differences in detail between demographic groups in urban populations, age, gender, income, etc. Moreover, little has been done in studies to look at the sustainability of the behavioural change, whether they enhance lasting changes in consumption or they are mere emergency measures. The present research will attempt to bridge these gaps by:

- Conducting the examination of pre-pandemic and post-pandemic consumption tendencies in the urban economy of Kerala.
- Questions of the underpinning of demographic determinants of behavioural change,
- Examining the long run consequences of digital adoption on consumption behaviour.

In this way, the study will help add subtlety to the changing picture of urban consumption and facilitate more precise policy, business and academic interventions.

3. RESEARCH METHODOLOGIES

This research employs the use of descriptive study design to examine the changes in the urban consumption behaviour during three pandemic stages. A structured questionnaire was used to collect data of 100 urban consumers. The primary data were retrieved through respondents and secondary data were accessed through journals, reports, and internet publications. Time and resource constraints allowed convenience sampling to be performed. Statistical instruments such as mean, percentage, and t-tests along with graphical representation were used in data analysis. The urban concern, the short-term period of data collection incident, the small sample size, and the limited method of gathering the data confined in self-reported responses are the limitations of the study.

4. RESULTS AND DISCUSSION

This part of the research paper presents the demographic profile of respondents in the context of specific concern of the study, online shopping behavioural shifts and attitudinal responses before, during and after COVID-19 pandemic. It also discusses the effect of COVID pandemic on the consuming pattern and frequency among urban customers in different category of goods. Last part of this discussion deals with the testing of hypothesis concerned.

4.1. Demographic Profile of Urban consumers

Table 1: Demographic Profile of Respondents

Demographic Variable	Category	Frequency	Percentage
Age	Up to 25	39	35.5%
	26–40	37	33.6%
	41–60	26	23.6%
	Above 60	8	7.3%
Gender	Male	55	50.5%
	Female	55	49.5%
Educational Qualification	No Formal Education	4	3.6%
	Primary Education	9	8.2%
	Secondary Education	20	18.2%
	Higher Secondary	19	17.3%



Demographic Variable	Category	Frequency	Percentage
Occupation	Graduation	58	52.7%
	Student	29	25.7%
	Working Professional	27	23.9%
	Business	23	20.4%
	Labourer	12	10.6%
	Housewife	1	0.9%
Monthly Income	Teacher	1	0.9%
	Up to ₹20,000	40	36.4%
	₹21,000–₹40,000	11	10%
	₹41,000–₹60,000	16	14.5%
	₹61,000–₹80,000	30	27.3%
	Above ₹80,000	13	11.8%

(Source: Primary data)

The demography of the respondents provides an important context to learning urban consumption change during COVID-19. Amazingly, according to the responses, close to 69 per cent of the respondents are under the age of 40 years, and this means that the majority of the respondents were younger and digitally linked consumers who were more probable to employ online shopping and digital services. A gender balance close to evenness will provide a balance in learning both male and female consumption trends including healthcare and household expenditure. The sample is highly literate, as more than a half of the respondents are graduates, who are more conscious about health risks, so they tend to be more cautious and contactless when it comes to consumption. A combination of students, professionals, and businesspersons highlights diverse economic consequences and adaptability being more focused on e-learning in the former, remote work in the second, and income change in the last group of individuals. The income span of the respondents is low to mid-range, which leads to their preferences to consumption. Consumers with low income concentrated on basics, whereas wealthy consumers consumed more in terms of health services and digital services. This population profile can be used to contextualise the overall consumption trends we see which are influenced by access to technology, economic stability, and awareness during the pandemic.

4.2. Online Shopping Behavioural Shifts and Attitudinal Responses During and After COVID-19

The frequency of online shopping found among the respondents during and after the COVID-19 pandemic is expressed in *Table 2*. The comparison also allows pointing out the behaviour change in terms of shopping with online platforms being a welcome alternative to in-store shops due to limited movements and concerns about safety. The information gives us useful hints on how the temporary changes caused by the pandemic might have resulted in permanent changes in the habits of shopping.

Table 2: Frequency of Online Shopping Before, During, and After COVID-19

Frequency	During COVID (%)	After COVID (%)
Never	18.2%	6.4%
Occasionally	68.2%	25.5%
Regularly	10.9%	56.4%
Very Frequently	2.7%	11.8%
Total	100%	100%

(Source: Primary data)

The percentages of income that respondents spent on online shopping before, during, and after the pandemic will be seen in *Table 3*. The statistics indicate slow but gradual rise in online shopping especially around the COVID era where shopping in real sense was limited. The tendency implies that online shopping continues to play a more pivotal role in household consumption, as after-pandemic spending dynamics have shown that people still rely on online shopping.

**Table 3: Percentage of Income Spent on Online Shopping (Before, During, and After COVID-19)**

% of Income Spent	Before COVID (%)	During COVID (%)	After COVID (%)
Less than 20%	84.5%	23.6%	21.8%
20 to 30%	12.7%	64.5%	15.5%
30 to 40%	2.7%	10.9%	58.2%
Above 40%	0%	0.9%	4.5%
Total	100%	100%	100%

(Source: Primary data)

Table 4 reflects the perceptions and attitudes of respondents towards online shopping in times of the pandemic. The figures of concurrence to crucial statements indicate how consumers rated the convenience, the reliability and reliance to the actions on online sites. The attitudinal responses facilitate explaining the exigencies of the existence of underlying psychological and experiential factors towards the observed changes in the pattern of consumption.

Table 4: Respondents' Agreement on Online Shopping Behaviour during the Pandemic

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Online shopping was more convenient during the pandemic	29.1%	54.5%	14.5%	0.9%	0.9%
Trust in online shopping platforms increased during the pandemic	15.5%	53.6%	24.5%	6.4%	0%
Purchased items online that were earlier bought from physical stores	43.6%	30%	20%	5.5%	0.9%
Pandemic increased dependence on online shopping for daily needs	40%	22.7%	25.5%	9.1%	2.7%

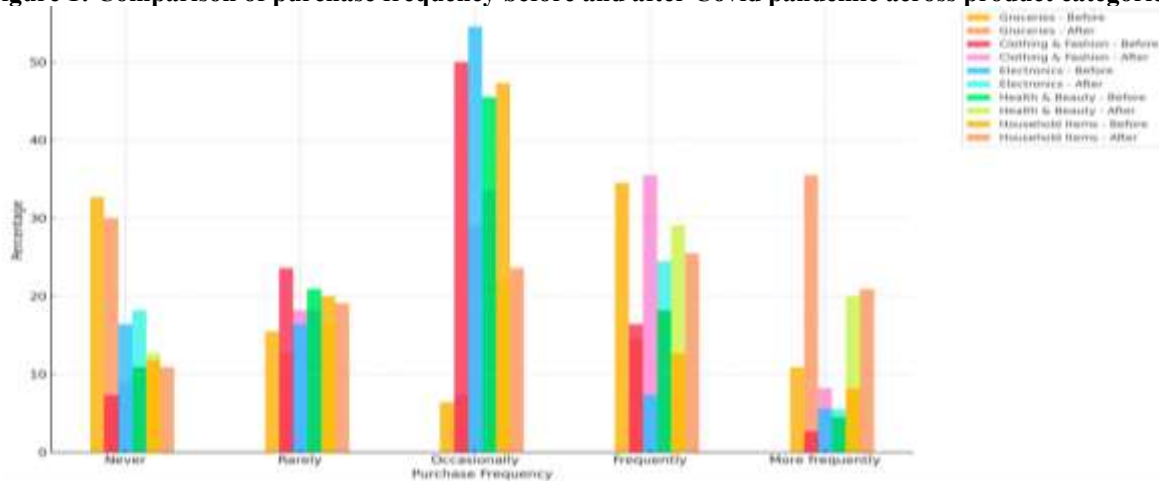
(Source: Primary data)

The COVID-19 pandemic has caused most urban consumers (68.2%) to do online shopping occasionally, with small proportion (13.6 %) doing the shopping regularly. Nonetheless, it was the post-pandemic trend that stuck explicitly as 68.2 per cent of the respondents have mentioned that they became regular daily or extremely frequent online shoppers, which is also linked Γ visibly to increased dependency and familiarity with online platforms. The percentages of the people who had never used online shops became much smaller, reaching only 6.4 of the 18.2% of the previous estimate, so this may indicate broader adoption of the digital world, including even those who were reticent consumers. As far as online spending is involved, before the pandemic, 84.5 per cent of those surveyed did not exceed spending 20 per cent of income online, which implies low activity. This has shifted due to the COVID situation, with 64.5 per cent of occupants spending between 20-30 per cent of their earnings on the internet, presumably triggered by limited access to real stores. This trend did not actually abate after the pandemic, but it was even more accelerated in the post-pandemic period with 58.2 per cent saying they spent 30-40 per cent of their income online and 4.5 per cent succeeded in spending more than 40 per cent of their money online indicating that urban behaviours of consumption have long-term GUI altered. This change is also strengthened by consumer sentiment. Eighty-three-point-six per cent of the respondents said online shopping is convenient in the pandemic, and 69.1 per cent said they trusted digital platforms more. It is worth noting that 73.6 per cent of them had moved away to buy online what they used to buy in physical locations. Besides, 62.7 per cent, felt even more dependent on online purchasing of everyday items, which highlights the importance of digital mediums in terms of providing convenience and continuity when there is a crisis.

4.3 COVID 19 Effect on purchase frequency across various Product categories

Following figure depicts the effect of Covid-19 pandemic on the frequency of purchases of various product categories by the urban population.

Figure 1: Comparison of purchase frequency before and after Covid pandemic across product categories.



The shift in purchasing trends of consumers in different product categories has been significant because of the COVID-19 pandemic. When it comes to groceries, the proportion of the consumers who buy more frequently increased drastically by 35.5% after the pandemic as compared to 10.9% before, whereas those who were frequent shoppers decreased by 14.5% as compared to 34.5%. This suggests the increased consistency in the grocery buying patterns where purchases depended on the level of necessity. In the category of clothing and fashion, there was a trend shift of purchase occasionally towards purchasing frequently. Pre-COVID 50 per cent had occasional purchase, post-COVID frequent purchasers rose to 35.5 per cent with a small increase in the more frequent category indicating it had returned to purchasing but perhaps in online forms. There was also a big growth in the buying of electronics especially with regular purchasers where the number rose to 24.5% then compared to 7.3% previously. This indicates increased dependence on electronic products (probably because of the necessity of home-based work and learning). Infrequent purchases were also reduced, which denotes more purchase on a need bases. The frequency of purchases scored statements in health and beauty sphere with a significant rise in frequent (18.2% to 29.1%) and more frequent (4.5% to 20 per cent). Regular purchase was also experienced in household items. Frequent purchases were also doubled 12.7 % to 25.5 %, more frequent purchases were increased by 8.2% to 20.9 % which is more focused on home centred living. On the whole, the statistics reveal that there is a distinct change of occasional purchase to the more regular one within all of the categories such as specifically groceries, electronics and personal care due to lifestyle changes, health issues and remote-working conditions in the post-pandemic global world.

Table 5: Paired Samples Correlations – Pre and Post COVID-19 Consumption

Product Category	N	Correlation (r)	Significance (p-value)
Groceries	110	0.883	0.000
Clothing & Fashion	110	0.582	0.000
Electronics	110	0.676	0.000
Health & Beauty	110	0.618	0.000
Household Items	110	0.688	0.000

All product categories have high and significant positive levels of correlation ($p < 0.001$) between pre- and post-COVID purchasing behaviour buying behaviour where groceries are the most highly correlated ($r = 0.883$) between pre- and post-COVID purchasing behaviour buying behaviour which indicates the greatest levels of continuity and increases in consumption patterns post-pandemic.

Table 6: Paired Samples t-Test – Pre and Post COVID-19 Consumption

Product Category	Mean Difference	t-Value	df	p-Value	Significant?
Groceries	-0.373	-4.888	109	0.000	Yes
Clothing & Fashion	-0.318	-3.596	109	0.000	Yes
Electronics	-0.118	-1.400	109	0.164	No
Health & Beauty	-0.427	-4.290	109	0.000	Yes
Household Items	-0.409	-4.511	109	0.000	Yes



The paired samples t-test was conducted to compare the mean consumption patterns of urban consumers before and after the covid-19 pandemic across five categories. At significance level of 0.05: Groceries, clothing and fashion, health and beauty, and household items all showed statistically significant differences in consumption before and after the pandemic ($p < 0.05$). Thus, the null hypothesis is rejected for these categories except Electronics consumption did not show a significant difference ($p = 0.164$), so the null hypothesis is not rejected for this category Noticeable growth was evidenced in Groceries, Clothing & Fashion, Health & Beauty, and Household Items after COVID ($p < 0.05$). Electronics did not demonstrate any statistically significant difference in the purchase frequency ($p = 0.164$).

5. CONCLUSION

The paper investigated the way COVID-19 transformed urban consumption in Kerala with a special emphasis on the shift towards digital shopping. Consumer trends changed dramatically due to health issues, lockdown and online access. This change was spearheaded by young, educated, and tech-savvy individuals and there is a greater frequency of online shopping and more spending on digital observed post-pandemic. Infrequent buyers decreased, regular and very frequent buyers increased significantly meaning that there is a permanent behavioural shift. Consumers changed their shopping habits and increasingly spent the money they earned on the internet. At the product level, spending on purchases of groceries, health & beauty supplies, household goods and clothing grew to a very large extent. Groceries demonstrated the highest level of behavioural continuity and electronics have a lower one. The pandemic accelerated the long-term usage of digital worlds, the increase in confidence in online shopping, and focus on convenient and healthy factors. Businesses and policymakers should adjust to these permanent changes in order to serve post-pandemic urban consumers better.

Implication: Retailers and marketers should fortify their online presence, develop smooth online experience, and make it about essential and wellness related products. The government ought to facilitate digital literacy and infrastructure to aid in further adoption of e-commerce. With the adoption of online consumption as the new culture, it is critical that businesses should embrace this changing trend to meet the consumer in order to sustain their footing in the market.

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