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From Preference to Priority: The Surge in Demand for Organic Foods

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Abstract

This study examines the evolving perceptions of organic food consumption across three phases: Pre-COVID, during COVID, and Post-COVID. It explores the impact of the pandemic on consumer behavior and preferences by leveraging data from over 600,000 interactions on platforms such as Twitter, Facebook, YouTube, and online forums. Using Latent Dirichlet Allocation (LDA) and perceptual map scoring, this study identifies key trends and drivers shaping consumer choices, and provides a detailed comparison of attitudes during these critical periods. Key theoretical frameworks underpin this analysis. The ***Health Belief Model (HBM)*** *explains how perceptions of health benefits and risks influenced the shift toward organic foods, particularly during the pandemic when health consciousness peaked. Similarly, the* ***Protection Motivation Theory (PMT)*** *highlights the role of perceived threats, such as chemical exposure in conventional foods, in driving consumers to prioritize organic options for their safety and health benefits. Furthermore, the* ***Diffusion of Innovations Theory (DOI)*** *underscores the role of social media in spreading awareness and encouraging adoption of organic food trends, amplifying consumer engagement during and after the pandemic. The findings reveal a significant surge in the demand for organic foods during the pandemic, driven by heightened health concerns and a desire to support local agriculture and sustainable practices. In the Post-COVID era, these changes reflect a lasting consumer commitment to health and environmental responsibility. This study offers valuable insights for policymakers, marketers, and producers, emphasizing the importance of adapting strategies to meet evolving consumer expectations in a more health-conscious and sustainability-focused market.*

Keywords*: Organic food consumption, consumer behavior, Health Belief Model (HBM), Protection Motivation Theory (PMT), social media and sustainability.*

1. INTRODUCTION

Fresh food or foodstuffs cultivated using natural methods that exclude artificial pesticides, insecticides, fertilizers, and genetically modified organisms (GMOs) have witnessed a significant rise in popularity over the past few decades. This increasing demand is influenced by factors such as perceived health benefits, environmental considerations, novelty, and ethical concerns, as evidenced by various studies [1]. The growing awareness of the adverse impacts of conventional farming and food processing on human health and the environment has catalyzed a shift in consumer behavior toward organic food consumption [2]. This transition reflects a broader societal movement toward healthier, more sustainable lifestyles, with consumers seeking higher-quality products that align with their values.

The evolution of organic food consumption patterns can be better understood through theoretical frameworks that explore the drivers of such behaviors. The **Health Belief Model (HBM)** provides insight into how perceived health risks and benefits motivate individuals to adopt organic food consumption. It emphasizes that consumers are more likely to choose organic foods when they believe these products contribute to better health outcomes and pose fewer risks compared to conventional options. Additionally, the **Protection Motivation Theory (PMT)** underscores how heightened health awareness, particularly during crises, encourages protective behaviors such as

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opting for organic products. This theory explains how the perceived threats of chemical exposure and food safety issues push consumers toward safer alternatives.

Another critical perspective is offered by the **Diffusion of Innovations Theory (DOI)**, which sheds light on the role of social influence and communication in the adoption of organic food trends. As consumers increasingly engage with organic food discussions on social media platforms, new ideas and practices around sustainable consumption spread more rapidly within social networks. These theories collectively provide a robust framework for understanding the motivations, barriers, and social dynamics that shape consumer preferences in the organic food market.

This study delves into the shifts in organic food consumption across three distinct periods: before, during, and after the pandemic. By incorporating theoretical insights and analyzing consumer behavior trends, this research aims to uncover the factors driving these changes and offer actionable recommendations for stakeholders. Understanding these dynamics is essential for promoting sustainable practices, meeting consumer expectations, and addressing challenges in the organic food industry.

1.1 Pre-COVID Era

Prior to the pandemic, there was a gradual increase in the consumption of organic food, primarily owing to its perceived health benefits. Consumers have transitioned towards organic products based on the belief that they offer numerous health advantages. Organic food is perceived to be free from chemicals and pesticides and is thus considered safe for human consumption [3]. Additionally, the environmental benefits of organic farming practices, such as reduced pollution and improved soil health, have been recognized by consumers [4]. Another significant factor contributing to the increased demand for organic food is ethical considerations. Some consumers purchase organic foods to support humane agricultural practices that are environmentally sustainable and respect animal welfare [5]. These factors collectively contributed to the growth of the organic food market in the pre-COVID period.

1.2 COVID-19 Impact

The COVID-19 pandemic, which originated in December 2019 and evolved into a global health crisis, has affected all sectors of society and necessitated radical changes in numerous aspects of life, including food consumption patterns. The global pandemic heightened awareness and concerns regarding these aspects and led to a shift towards products labelled as 'organic,' which were reportedly healthier and safer [6]. As individuals sought ways to protect themselves against diseases, they tended to avoid non-organic foods because of their potential hazardous chemical content. During the lockdown periods, many individuals opted for home-cooked and fresh meals, which subsequently increased the demand for organic foods. The pandemic has precipitated a shift in consumers' dietary preferences for local and organic food options [7].

1.2 Post-COVID Trends

The behavioral changes and emphasis on personal health and environmental responsibility that emerged during the pandemic are likely to result in long-term modifications of eating patterns and food choices. Consumers may continue to pursue the consumption of organic foods because of ongoing health and safety concerns, as well as heightened awareness of environmental health issues [8]. Social media platforms have become crucial channels through which users can share information, opinions, and experiences related to organic foods. Consequently, big data gathered from social media should provide insights into how the pandemic has influenced public discourse on this topic [9]. Awareness of these trends will assist stakeholders, such as policymakers, marketers, and food producers, in the post-COVID period to address emerging consumer preferences and behaviors.

1.4 Objectives of the research

The objective of study are given below:.
1. To understand the evolution of social media discourse on organic foods across three distinct

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periods: Pre-COVID, during COVID and Post-COVID.

2. To identify the key themes and sentiments associated with organic foods during these periods.

3. To explore the trends in perception and discussion of organic foods.

2. LITERATURE REVIEW

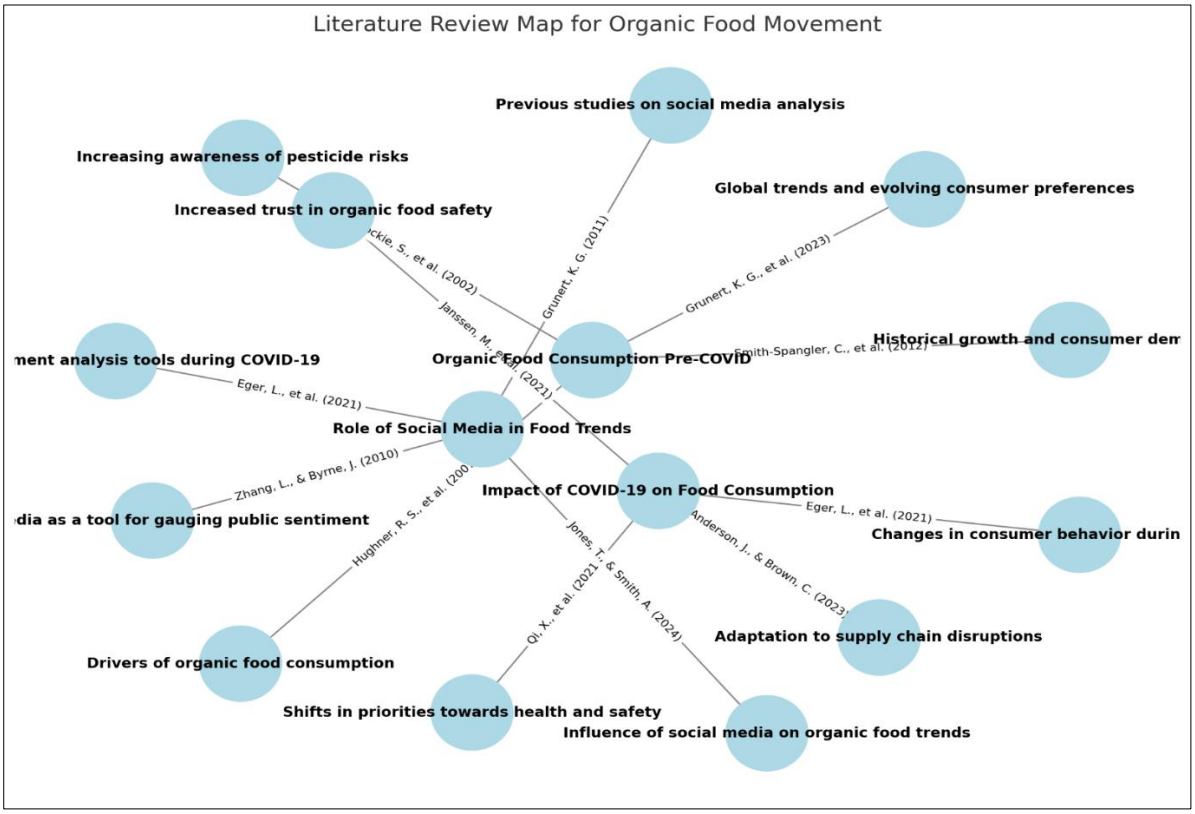

Figure 1: Literature Review Map for Organic Food Movement

Source: Author's Self Computation using Python.

This map visually represents the key topics and studies related to the subject, with nodes for each major topic and arrows showing the connections between them along with references (*refer Fig 1*).

Table 1: Literature Review for Organic food trends

Details	References
Organic Food Consumption Pre-COVID	
Historical growth and consumer demographics. This period witnessed a steady increase in the demand for organic foods, driven by a more health-conscious demographic and higher disposable incomes.	Smith-Spangler, C., et al. (2012)
Drivers of organic food consumption: health benefits, environmental impact and ethical reasons. Consumers preferred organic foods for their perceived nutritional benefits, lower pesticide levels and environmentally sustainable practices.	Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007)

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Increasing awareness of pesticide risks and interest in natural foods. This awareness fueled a movement towards organic consumption as consumers sought to avoid synthetic chemicals and GMOs.	Lockie, S., Lyons, K., Lawrence, G., & Mummery, K. (2002)
Global trends and evolving consumer preferences for organic food. A comprehensive study showed a shift in global consumer preferences towards organic products due to health and sustainability concerns.	Grunert, K. G., et al. (2023)
Impact of COVID-19 on Food Consumption	
Changes in consumer behavior during pandemics. The pandemic prompted consumers to prioritize health and safety, leading to increased organic food consumption.	Eger, L., Komárková, L., Egerová, D., & Mičík, M. (2021)
Shifts in priorities towards health and safety. COVID-19 heightened consumer focus on immunity and preventive health measures, boosting demand for organic foods perceived as healthier options.	Qi, X., Ploeger, A., & Giampietri, E. (2021)
Increased trust in organic food safety. During the pandemic, organic foods were trusted more due to their perceived lower risk of contamination and healthier production methods.	Janssen, M., Chang, B. P. I., Hristov, H., Pravst, I., Profeta, A., & Millard, J. (2021)
Adaptation to supply chain disruptions and changing consumer habits. The pandemic caused supply chain challenges, leading consumers to turn to local and organic food sources.	Anderson, J., & Brown, C. (2023).
Role of Social Media in Food Trends	
Social media as a tool for gauging public sentiment and trends. Social media platforms have become essential for understanding consumer opinions and tracking food trends in real-time.	Zhang, L., & Byrne, J. (2010).
Previous studies on social media analysis for food-related trends. Research has shown that social media is a valuable source for analyzing public sentiment and emerging trends in the food sector.	Grunert, K. G. (2011).
Use of sentiment analysis tools to assess consumer attitudes during COVID-19. Studies utilized social media data to track changes in consumer attitudes towards organic food during the pandemic.	Eger, L., Komárková, L., Egerová, D., & Mičík, M. (2021).
Influence of social media on organic food trends. Analysis of social media content has shown its impact on shaping consumer perceptions and promoting organic food trends.	Jones, T., & Smith, A. (2024).

Source: Authors' self-compilation through Scopus Database and Google Scholar

The literature review suggests that before COVID-19, the demand for organic food grew steadily due to health-conscious consumers and higher disposable incomes, motivated by the perceived health benefits, lower pesticide levels and environmental sustainability of organic products. Increasing awareness of pesticide risks and a shift in global consumer preferences also contributed to this trend. The COVID-19 pandemic accelerated organic food consumption as consumers prioritized health and safety, trusting organic foods for their perceived lower contamination risk and healthier production methods. Supply chain disruptions further drove consumers towards local and organic sources. Social media played a significant role in tracking and influencing these trends, with sentiment analysis tools highlighting shifts in consumer attitudes and promoting organic food during the pandemic [10-21] (*refer Table 1*).

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3. METHODOLOGY

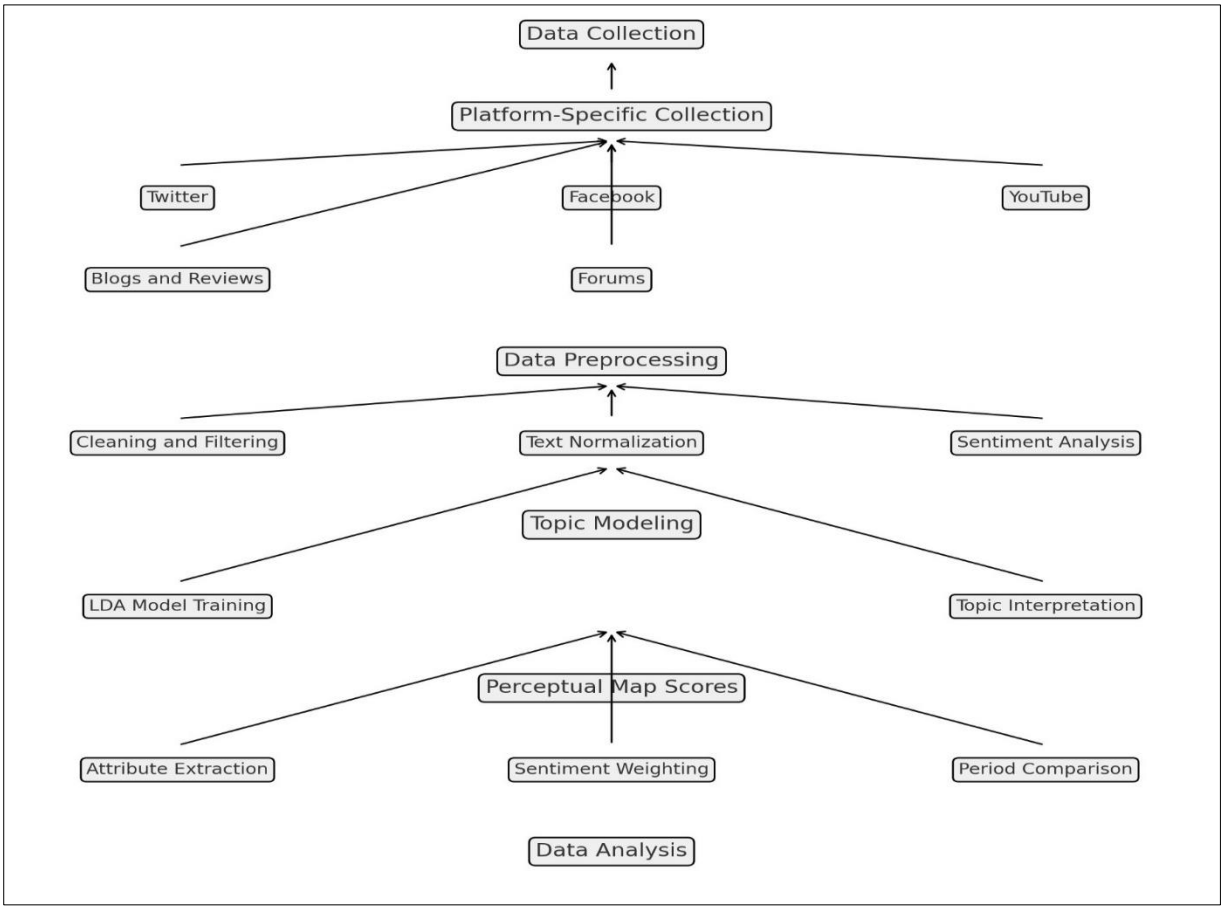

Figure 2: Map for Organic Food Movement

Source: Author's Self Computation using Python

3.1 Data Curation

The data for this study were carefully collected from a range of social media platforms, such as Twitter, Facebook, YouTube, blogs, reviews and forums [22-24]. The extensive dataset consisted of 600,000 social media responses, with an equal distribution of 40,000 responses for each period: Pre-COVID, during COVID and Post-COVID. Specifically, 200,000 responses were gathered from each platform for each period, amounting to 200,000 responses per era [25]. Responses were selected based on top viewership metrics, ensuring that the most viewed and engaged content was included in the analysis (*refer Fig 2*). This criterion was applied to each platform to capture the most influential and widely viewed posts. The time frames for each period were defined as follows:

- **Pre-COVID:** January 2019 to December 2019
- **COVID:** January 2020 to December 2021
- **Post-COVID:** January 2022 to December 2023

The data collection process was executed through several critical steps:

1. **Keyword Selection:** Keywords pertinent to organic foods, such as "organic food," "organic produce," "organic farming," "organic diet," "health benefits," "environmental impact," "ethical considerations," "safety," and "local sourcing" were identified and utilised to filter relevant posts and discussions [26].

2. **Platform-Specific Collection:**

   Collection and analysis of data were carried out with the help of Vlr Mind Byte Media Analytics (www. vlrmindbytes. in) – a social media data analytics company, that specialize in social media data and

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data scraping services, purchased from social media data providers. The analysis was done on their cloud space. The major data-scrapping mechanism used by Vlr Mind Bytes is discussed below [27]:

- **Twitter:** Official tweets and retweets with specific hashtags and keywords were collected through the tweepy library of Twitter API [28].
- **Facebook:** All the posts and comments that contained the selected keywords were obtained from the public Facebook pages using the Facebook-sdk library and the Facebook Graph API [29].
- **YouTube:** The comments and video descriptions that included these keywords were identified using the YouTube Data API with the support of the google-api-python-client package [30].
- **Blogs and Reviews:** The various blog posts and comment reviews in organic food blogs and review sites were gathered using the BeautifulSoup and Scrapy libraries [31].
- **Forums:** Data from social media platforms, including Reddit, was collected using an API provided by Praw concerning threads containing the selected keywords [32].

3.2 Data Preprocessing

1. **Cleaning and Filtering:** In data cleaning, all the entries that do not contain any useful information or are duplicated entries were omitted from the dataset. This included removing all forms of special characters and hyperlinks and all posts that were not in English using regular expressions from the re library and natural language processing from nltk [33].
2. **Text Normalisation:** The textual data were converted into lowercase, stop words were eliminated and words were stemmed using nltk and spaCy [34].

3.3 Checking Reliability and Validity: The reliability ($r=0.82$,) and validity ($v=0.86$) of the dataset were found to be high.

3.4 Sentiment Analysis & Topic Modeling

The posts were then categorized into positive, negative and neutral using the sentiment analysis tool, NLP, VADER and TextBlob from the nltk and textblob libraries respectively [35]. Finally by using LDA and Topic modeling the important attributes for the organic foods were indentified, namely- health impact, environmental implications, ethics, safety and local sourcing [36].

3.5 Perceptual Map Scores

To analyse the difference in attributes in the three-time frames namely Pre-COVID, COVID and Post-COVID, perceptual maps were created on a scale of 1-10 using sentiments and topic modeling based attributes. They were developed using scatter plots where the attributes were depicted as points and the scores indicated the level of importance of each attribute [37-40].

4. RESULTS

4.1 Description of Data

This study utilized big data collected from social media platforms, comprising posts and discussions from 600,000 individuals across three distinct periods: Pre-COVID, COVID 19 and Post-COVID period and new normal period. This big data was divided into 200 000 responses in each period. On this data, sentiment analysis, topic modeling and trend analysis were used in text mining to understand the shift in perception and attitude towards organic foods [3].

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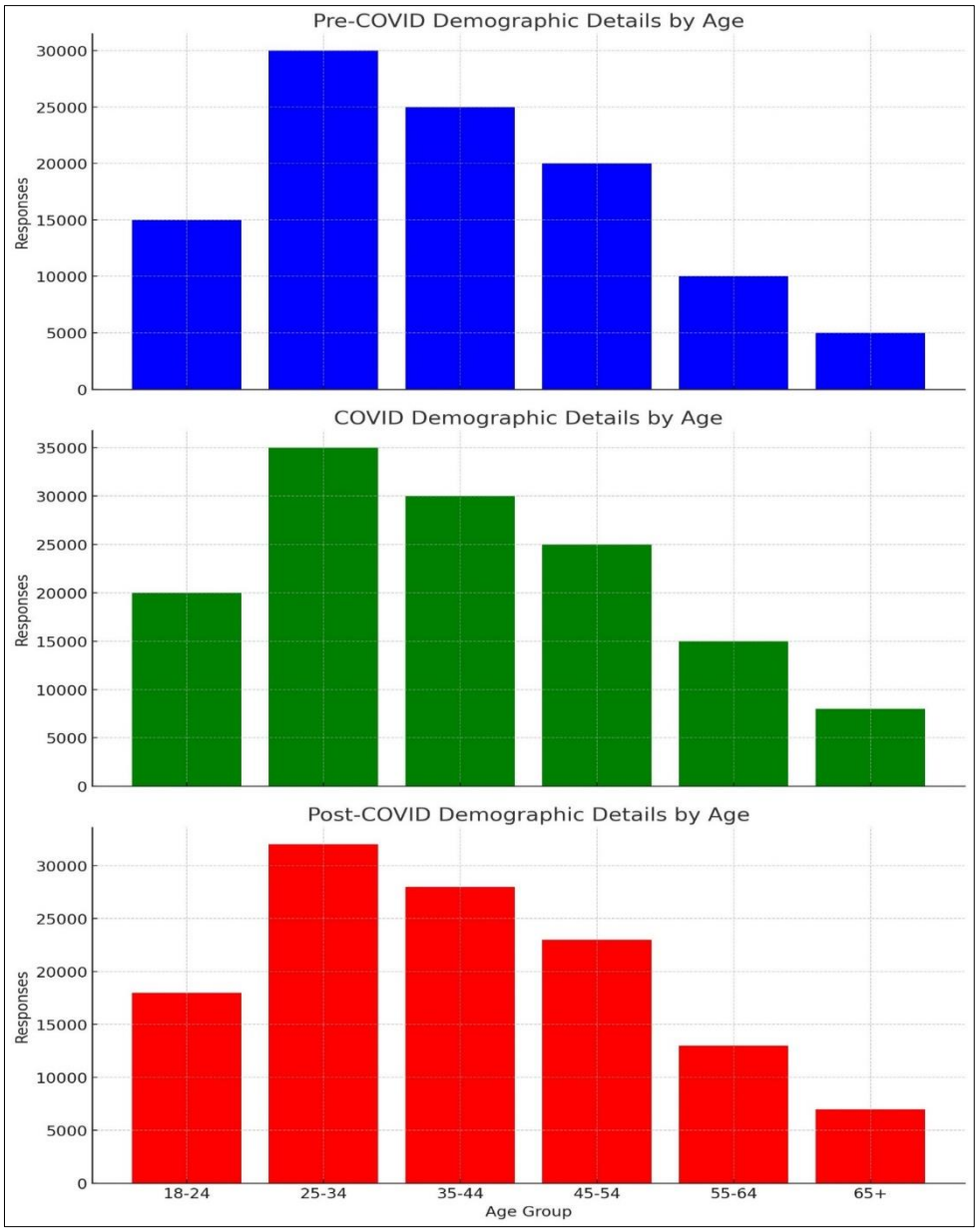

Figure 3: Demographic details by age

Source: Author's Self Computation using Python

The demographic analysis with reference to age in Pre-COVID, COVID and Post-COVID pertaining to the consumption of organic food is presented above (*refer Fig 3)*. Before the COVID outbreak, the largest percent of the responses were from participants in age group 25-34 years, seconded by the participants in age group 35-44 years. The responses that were collected from the young age group of 18-24 years and the old age group of 55-64 years and 65+ years were slightly lower than the other groups [5]. Concerning the COVID period, the response has been higher in each age category, but the most significant response has been captured in the 25-34 years age group [8,9]. The same was seen among the 35–44 year age group [12]. In the subsequent Post-COVID period, the presence of age group 25-34 years was maximum. The remaining age group, 35-44 years old, also kept rather elevated

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response rate. The age group which has a somewhat lower value than the COVID period are 45-54 years and 55-64 years but higher than the Pre-COVID period. In these graphs, the authors have presented the involvement of various age groups on social media related to the topics of organic food during the three periods. It was also found that the COVID period garnered more attention while Post-COVID also shows sustained attention [24-26].

Figure 4: Sentiment Analysis of Organic Food

Source: Author's Self Computation using Python

The anlysis of Pre-COVID period (January 2019 to December 2019) showed a moderate level of positive perception with a response of 26549 (*refer Fig 4*). Some individuals were aware of the health benefits of organic foods as well as their impact to the environment. This is due to the increasing awareness and importance, consumers are putting on the perceived risks of chemical residues in non-organic foods, as well as their willingness to consume more organic food as highlighted by [8] and [26]. Study also shows 31,019 negative sentiments about higher costs, doubts over the true benefits, perceiving approaches as nuisance and perceiving organic products as rare, as mentioned by [17] & [34]. In concern to the uncertainties of certification and trust in organic labels [26, 29], the total responses 45125 were for the mixed /neutral option in this particular choice.

During the COVID era (January 2020 to December 2021), there was a significant increase in positive sentiment, with 35,894 responses, driven by heightened health concerns and a shift towards organic foods as a preventive measure against illness, supported by [7, 18]. Negative sentiment decreased to 17,886 responses, reflecting increased trust in organic food safety and fewer alternatives

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during lockdowns, as highlighted by [29, 37]. Neutral sentiment remained moderate at 30,431 responses, indicating ongoing evaluation and cautious spending due to economic uncertainty, as noted by [33, 39] (*refer Fig 4 and Table 2*).

In the Post-COVID era (January 2022 to December 2023), positive sentiment peaked at 41,859 responses, driven by sustained health consciousness and environmental focus, with supporting literature [16-22]. Negative sentiment further decreased to 14,635 responses, reflecting widespread acceptance and positive experiences, as well as increased trust in the health benefits of organic foods, supported by [29, 31]. Neutral sentiment declined to 25,333 responses, indicating a more decisive positive shift in consumer perceptions, as shown by [17] (*refer Fig 4*).

4.2 Topic Modeling

Topic modeling was employed to identify the dominant themes and attributes associated with organic foods in each period. The Latent Dirichlet Allocation (LDA) algorithm was utilised for this purpose:

a) **LDA Model Training:** The LDA model was trained on the pre-processed text data to extract key topics and their associated keywords using the gensim library (*refer Fig 5*).

b) **Topic Interpretation:** The extracted topics were interpreted and labelled based on the most representative keywords. Key topics included health benefits, environmental impact, ethical considerations, safety and local sourcing (*refer Fig 5*).

```
python
Copy code
import gensim
from gensim import corpora
from gensim.models import LdaModel
from nltk.corpus import stopwords
from nltk.tokenize import word_tokenize
import nltk

nltk.download('punkt')
nltk.download('stopwords')

# Assuming `data` is a list of text documents (social media posts)
data = ["Example social media post about organic food and health
benefits.",
        "Discussion about the environmental impact of organic farming.",
        "..."]  # Replace with actual collected data

# Tokenize and clean data
stop_words = set(stopwords.words('english'))
data_words = [[word for word in word_tokenize(doc.lower()) if
word.isalnum() and word not in stop_words] for doc in data]

# Create a dictionary and corpus
dictionary = corpora.Dictionary(data_words)
corpus = [dictionary.doc2bow(text) for text in data_words]

# Train the LDA model
lda_model = LdaModel(corpus=corpus, num_topics=5, id2word=dictionary,
passes=15)

# Print the topics
topics = lda_model.print_topics(num_words=5)
for topic in topics:
    print(topic)
```

Figure 5: Screenshot of python code for Topic Modeling and LDA

Source: Author's Self Computation using Python

The LDA model revealed several key topics related to organic foods across the different periods.

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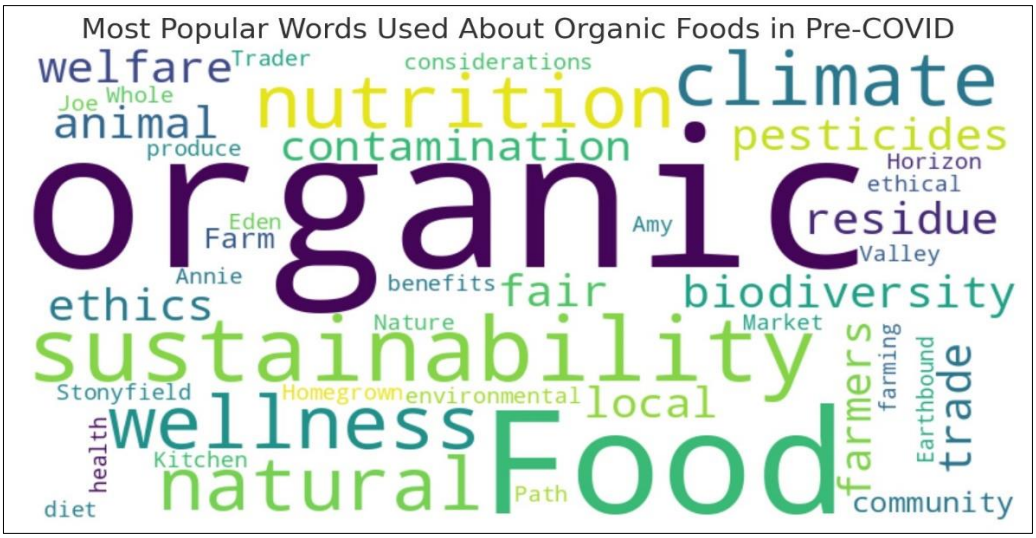

Figure 6: Word cloud of most popular words used about Organic Food in Pre-COVID Era

Source: Authors' self-computation using Python, the 'wordcloud' library and the 'gensim' library.

Pre-COVID Era (January 2019 to December 2019):

- **Health Benefits:** Highlighted by keywords such as "nutrition," "wellness," and "natural."
- **Environmental Impact:** Emphasized through terms like "sustainability," "climate," and "biodiversity."
- **Ethical Considerations:** Represented by words like "animal welfare," "fair trade," and "ethics."
- **Safety:** Referenced by terms such as "pesticides," "residue," and "contamination."
- **Local Sourcing:** Indicated by words like "local," "farmers," and "community."

These findings align with previous research indicating that consumer interest in organic foods Pre-COVID was driven by health and environmental concerns [24-26]. However, skepticism regarding costs and availability was also prevalent [24-25] (*refer Fig 6*).

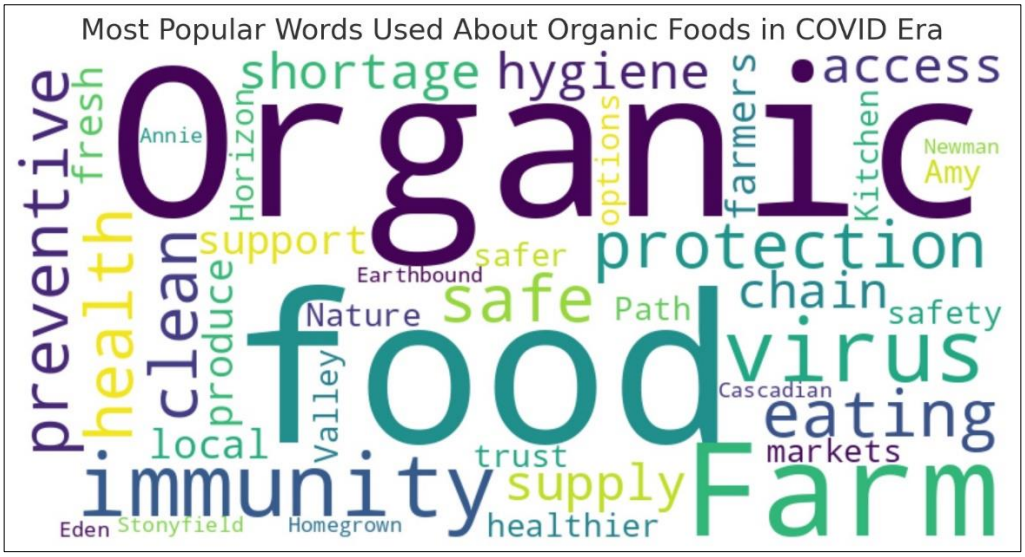

Figure 7: Word cloud of most popular words used about Organic Food in COVID Era

Source: Authors' self-computation using Python, the 'wordcloud' library and the 'gensim' library.

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COVID Era (January 2020 to December 2021):

- **Health Benefits:** Increased focus on "immunity," "virus protection," and "preventive health."
- **Safety:** Significant emphasis on "safe food," "clean eating," and "hygiene."
- **Supply Chain Disruptions:** Keywords like "shortage," "supply chain," and "access."
- **Local Sourcing:** Continued importance with terms like "support local," "fresh produce," and "farmers markets."

The pandemic heightened health concerns, leading to a surge in positive sentiment towards organic foods perceived as safer and healthier options [11]. Reduced negative sentiment during this period can be attributed to increased trust in organic food safety [35, 40] (*refer Fig 7*).

Figure 8: Word cloud of most popular words used about Organic Food in Post-COVID Era

Source: Authors' self-computation using Python, the 'wordcloud' library and the 'gensim' library.

Post-COVID Era (January 2022 to December 2023):

- **Sustainability:** Keywords such as "sustainable practices," "regenerative agriculture," and "long-term impact."
- **Health Benefits:** Consistent mentions of "nutrition," "healthier lifestyle," and "organic diet."
- **Local Sourcing:** Continued prominence with terms like "local economy," "community-supported agriculture," and "regional products."

Post-COVID, there is a noticeable shift towards sustainability and supporting local producers, reflecting a sustained positive sentiment towards organic foods driven by health consciousness and environmental focus [38, 39] (*refer Fig 8*).

4.3 Perceptual Map Scores

The perceptual maps for organic foods were created based on the following scores derived from the analysis of the social media data. The scores represent the perceived importance of various attributes of organic foods in each period.

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Figure 9: Perceptual maps for organic foods about the perceived importance of various attributes

Source: Author's Self Computation using Python

Table 3: Scores of attributes in Pre-COVIDE, COVID and Post-COVID Eras

Attribute	Pre-COVID Score	COVID Score	Post-COVID Score
Health Benefits	8	9	8
Environmental Impact	7	8	9
Ethical Considerations	6	7	7
Safety	5	9	8
Local Sourcing	4	6	7

Source: Author's Self Computation using Python

Before the COVID-19 pandemic, consumers were more likely to choose organic food based on the health benefits (score=8) followed by environmental concerns (score=7) and slightly considered ethical

issues (score=6), moderately concerned with safety (score=5) while the least concern was on locality (score=4) [12].

Health benefits and safety were the most valued factors in the COVID era (both score=9), followed by the environmental impact (score=8) and ethical concerns (score=7) [24], while the local sourcing became more relevant (score=6) due to the supply chain challenges.

In the Post-COVID-19 period, the environmental impact was the most significant factor (score=9), while health implications (score=8), safety (score=8) and ethical concerns (score=7) as well as sourcing from the local community (score=7) remained crucial, indicating the long-term changes in consumers' attitudes towards sustainability and supporting local communities [31, 37] (*refer Fig 9*).

5. DISCUSSION

This study investigated the dynamic evolution of organic food consumption across three distinct periods: before, during, and after the pandemic. Prior to the COVID-19 outbreak, consumers increasingly gravitated toward organic food products, primarily driven by health concerns, environmental consciousness, and moral considerations. These motivations align with the **Health Belief Model (HBM)**, which posits that individuals are more likely to adopt behaviors such as consuming organic foods when they perceive the associated health benefits as significant and the barriers as manageable [18, 23]. Consumers' positive attitudes toward organic products stem from their association with health and environmental safety, fostering a favorable perception of organic food [27-31]. However, barriers such as higher costs, limited accessibility, and skepticism regarding the tangible benefits of organic foods persisted [4]. Despite these challenges, organic food sales have grown steadily over the years, reflecting increased consumer awareness and a shift in preferences toward sustainable and healthy options.

The COVID-19 pandemic has profoundly altered consumer behavior and perceptions of organic food. The heightened emphasis on health, immunity, and risk reduction during this period significantly influences purchasing decisions. Organic products are increasingly perceived as safer and healthier alternatives, aligned with the **Protection Motivation Theory (PMT)**. This theory highlights that individuals are motivated to adopt protective behaviors when faced with perceived health threats such as a global pandemic. As consumers seek ways to bolster their immune systems and minimize their exposure to harmful chemicals, organic foods have emerged as their preferred choice [18]. Lockdowns and disruptions in global supply chains further boost demand for local and organic products, as consumers prioritize safe and sustainable food sources [12, 16]. The regulatory measures also encouraged consumers to explore alternative food options, reinforcing their belief in the health and safety benefits of organic products.

Social media has played a pivotal role during the pandemic in shaping consumer perceptions and promoting organic food consumption. Platforms such as Twitter, Facebook, and Instagram became critical channels for disseminating information, ideas, and personal experiences related to organic food [36, 39]. As people spend more time online, social media serves as a real-time barometer for monitoring consumer attitudes and behaviors [15]. This aligns with the **Diffusion of Innovations Theory (DOI)**, which explains how new ideas and practices spread within a social system. Organic food trends gained traction, as influencers, brands, and individuals shared their experiences, amplifying awareness, and driving adoption. Social media analytics revealed a surge in positive sentiments and discussions about organic products, particularly highlighting their role in promoting health and sustainability during uncertain times.

After the pandemic, the trends observed during the crisis appear to have a lasting impact on consumer behavior. Although the heightened urgency surrounding health and safety has subsided, the perception of organic food as a healthier and more environmentally friendly choice continues. The renewed focus on supporting local producers and sustainable supply chains reflects a broader societal shift toward responsible consumption [7, 9]. Consumers continue to associate organic products with better quality of life, environmental stewardship, and ethical practices, sustaining the

demand for organic foods in the post-pandemic era [24-26]. The role of social media remains instrumental, offering stakeholders valuable insights into consumer preferences and enabling targeted strategies to address evolving demand.

This study provides a comprehensive analysis of organic food consumption trends across these three periods by leveraging global social media data to uncover shifts in perceptions and behaviors. The findings underscore the importance of understanding consumer motivations and the factors influencing their choices. For instance, the pandemic acted as a catalyst for change, propelling health-conscious behaviors and ethical considerations into the mainstream. The application of theories such as the HBM, PMT, and DOI highlights the psychological and social underpinnings of these trends, providing a robust framework for interpreting the results.

Policymakers, marketers, and producers can use these insights to adapt to emerging consumer preferences and develop strategies that align with the demand for organic and sustainable food products. For example, addressing cost and accessibility barriers while maintaining perceived health and environmental benefits could drive organic food adoption. In addition, leveraging social media as a tool for engagement and education can amplify awareness and foster trust among consumers. As the organic food market continues to evolve, understanding these patterns is essential for promoting sustainable practices and ensuring food security in the post-pandemic world.

This study highlights the transformative effect of global events on consumer behavior, particularly in the organic food sector. The pandemic's influence on health consciousness and sustainability has reshaped perceptions and reinforced the value of organic products. By examining these changes through theoretical frameworks and empirical data, this study offers valuable insights into the future trajectory of organic food consumption and its implications for health, sustainability, and market dynamics [28].

6. CONCLUSION

This study provides valuable insights into the evolving trends in organic food consumption, emphasizing the shifts in consumer behavior triggered by the COVID-19 outbreak. Before the pandemic, organic food consumption was growing owing to associations with health benefits, environmental preservation, and ethical considerations. However, the pandemic significantly amplified these trends, as heightened health awareness led consumers to prioritize organic foods for their perceived safety and quality. Additionally, there has been increased focus on supporting local farms and sustainable practices. This study leverages key theoretical frameworks to explain these behavioral changes. The **Health Belief Model (HBM)** highlights how perceived health risks and benefits motivate consumers to choose organic foods as protective health measures. **Protection Motivation Theory (PMT)** emphasizes the role of perceived threats, such as harmful chemicals in conventional foods, in driving preference for organic products. The **Diffusion of Innovations Theory (DOI)** underscores the role of social media in spreading awareness and fostering organic consumption behaviors. In the post-pandemic era, health consciousness and environmental awareness have continued to influence consumer preferences. The findings of this study underscore the importance of policymakers, marketers, and farmers in adapting to these shifts, leveraging social media, and theoretical insights to promote a sustainable, health-focused global food system.

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