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RESEARCH ARTICLE

An Analysis of Consumer Preference and Behaviour for Whole Indian Spices, Nutraceuticals, Essential Oils, and Oleoresins among Non-Resident Indians (NRIs)

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Abstract

Indian spices are globally popular, as evidenced by the high demand and rising consumption worldwide. The popularity of Indian spices is due to the enhancement of culinary taste and the health benefits of each spice. Several Indian spices like pepper, cardamom, turmeric, and saffron seem to have unparalleled demand across the globe for a similar reason. For example, the consumption and use of turmeric are gaining a lot of attention from nutritionists and food scientists.

In India, spices are part of everyday cooking. Indian cuisine is well known for the inclusion of several spices in a single dish. However, it is observed that individuals who migrate tend to follow and imbibe the lifestyle, food habits, culture, practices and become part of the new setting. In light of this, the study seeks to examine whether Non-Resident Indians (NRIs) continue to adhere to their culinary traditions from their home country, particularly in the utilisation of whole spices. Food habits are generally based on culture and are also an important aspect that influences consumer behaviour. Further, the study also tries to understand the preference of consumers for using spice in its alternative forms.

The study focuses on understanding the choice between Nutraceuticals, Essential Oils, Oleoresin and whole Indian spices among the NRI consumers, based on their use for cooking and/or health benefits. An online and direct (telephone) survey was conducted, specifically seeking opinions from NRI's on their choice of spices in a foreign land. This study

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reveals interesting evidence about spices being consumed in the form of nutraceuticals and essential oils, which seems to be trending. Through the study, it was also understood that Indian Spices (recipes) are also being included in cuisines other than Indian cooking, which makes the study more appealing.

INTRODUCTION

India has always been recognised for its spices and herbs, which have brought many traders from across the globe for centuries. India is especially well known for spices like black pepper, cardamom, cinnamon, clove, nutmeg, coriander, turmeric and red chillies. The spices have contributed not only to culinary traditions but also to medicinal and preservative applications. Beyond their role in enhancing flavour, spices have long been valued for their therapeutic properties and use as natural colourants, reinforcing India's identity as a key hub in the global spice ecosystem.

In the contemporary context, India continues to dominate the global spice industry as the largest producer, consumer and exporter of spices. According to reports from the Spices Board of India (Ministry of Commerce and Industry), spice exports in the financial year 2025-26 were valued at ₹39,140.11 crore (US$ 4,430.90 million), which was 17.34 lakh tons of spices. India reached a record high in the financial year 2024-25 in both volume and value, amounting to approximately 17.99 lakh tonnes valued at around ₹39.999.48 crore (Spices Board India 2025, 2026).

India is estimated to account for over 40 per cent of global spice production (India Export Data, 2024). Among export commodities, chilli remains the leading item in terms of both quantity and value, while demand for spices such as cardamom, ginger and pepper has shown recent growth trends. However, fluctuations in export performance, such as the decline reported in FY 2025-26 due to reduced demand for chilly, fennel and cumin, indicate a dynamic and evolving global market. At the same time, projections suggest that India's spice exports may reach USD 10 billion by 2030, underscoring the sector's continued economic significance (Spices Board India, 2025).

While such macro-level data highlight India's strong position in global spice production and trade, they do not adequately capture the evolving patterns of consumption among diasporic populations. Increasing globalisation, coupled with advancements in transportation and communication technologies, has facilitated large-scale migration of Indians to different parts of the world. NRIs, while adapting to host-country cultures and consumption patterns, often retain strong ties with their culinary traditions and health practices. In particular, the consumption of Indian spices, nutraceuticals, essential oils, and oleoresins among NRIs reflects a complex interplay between cultural attachment, health consciousness and access to global retail channels.

Existing initiatives by institutions such as the Spices Board of India further demonstrate a supply-side focus on strengthening production, processing and export competitiveness. Efforts, including the establishment of crop-specific Spices Parks, promotion of advanced processing technologies and alignment with international quality and safety standards, are aimed at enhancing India's global market presence. However, these initiatives primarily emphasise production efficiency and export facilitation, with limited attention to the consumption behaviour and preferences of international end-users, particularly within diaspora communities.

REVIEW OF LITERATURE

Consumer Behaviour and Purchase Decision Processes: Consumer behaviour research emphasises that purchase decisions are not isolated acts but the outcome of a structured decision-making process involving need recognition, information search, evaluation of alternatives, purchase and post-purchase behaviour (Kotler & Keller, 2016). Within this framework, factors such as perceived quality, price sensitivity, brand trust and accessibility significantly influence consumer choices. Existing studies (Dalmia &

Goel, 2023; Patel, 2023) indicate that quality and price are dominant determinants in food-related purchase decisions. However, these findings are largely derived from domestic markets and may not fully capture the behavioural dynamics of diaspora consumers who operate within multicultural environments and face different consumption constraints. Thus, while prior research establishes the importance of core decision variables, it lacks contextual adaptation to cross-border and diaspora consumption behaviour, particularly in relation to traditional and value-added spice products.

Country-of-Origin Effect and Cultural Influence: The Country-of-Origin (COO) effect plays a crucial role in shaping consumer perceptions and purchase intentions, particularly in food products tied to cultural identity (Kala & Chaubey, 2016). Indian spices, being strongly associated with authenticity, tradition and heritage, benefit from positive COO perceptions among global consumers.

For diaspora populations such as NRIs, cultural attachment further reinforces this effect. Food consumption is not merely functional but also symbolic, reflecting identity, nostalgia and emotional belonging. Studies on cultural consumption suggest that migrants tend to retain food habits from their home country while simultaneously adapting to host-country influences. However, existing literature often treats COO as a static factor and does not sufficiently explore how it interacts with acculturation, globalisation, and hybrid consumption patterns in diaspora contexts.

Health Consciousness and Functional Consumption: An emerging body of research highlights the increasing role of health consciousness in shaping consumer behaviour. The growing demand for nutraceuticals, essential oils, and oleoresins reflects a shift from traditional consumption toward functional and preventive health-oriented consumption patterns. Contemporary studies (RedPencil, 2023) indicate that consumers are increasingly prioritising wellness, immunity-boosting products, and natural ingredients. This trend is especially relevant for Indian spices, which are widely recognised for their medicinal and therapeutic properties (e.g., turmeric for anti-inflammatory benefits, ginger for digestion). However, there remains limited empirical work examining how health awareness interacts with cultural preferences among NRIs, particularly in the choice between whole spices and processed derivatives such as nutraceuticals and oleoresins.

Branding, Quality Perception and Market Evolution: With the globalisation of supply chains, consumer markets have witnessed a transition from unbranded to branded products, especially in international markets. While unbranded spices remain prevalent in domestic Indian markets due to accessibility and cost advantages, international consumers, including NRI's, are more likely to rely on branded products that ensure quality assurance, safety compliance and traceability. Research suggests that perceived quality, certification, packaging and brand reputation significantly influence purchase behaviour in export markets. This is particularly important for processed spice products, which are subject to stricter regulatory standards. However, the literature does not sufficiently examine how NRIs evaluate and compare whole spices versus value-added products in terms of trust, authenticity and perceived benefits.

Digital Influence and Changing Consumption Channels: The rise of e-commerce and digital platforms has transformed consumer access to ethnic food products. Online retail enables diaspora consumers to overcome geographic barriers and access authentic Indian products globally. Studies (RedPencil, 2023) highlight the growing influence of social media, digital marketing and online reviews on consumer decision-making. These platforms shape awareness, brand perception and purchase intent. However, there is limited research on how digital exposure influences category-level choices (e.g. whole spices vs nutraceuticals) among NRIs and how online trust mechanisms interact with cultural and health-related motivations.

Trade and Product Diversification in the Spice Sector: From a supply-side perspective, India has increasingly shifted toward exporting value-added spice products, including processed and semi-processed items such as essential oils, oleoresins and nutraceuticals (Babu, 2017). This reflects an effort to enhance export value and meet evolving global demand. While export-oriented studies provide insights into production and

trade trends, they largely overlook end-consumer preferences and behavioural drivers in international markets. In particular, there is insufficient integration between export diversification strategies and consumer demand patterns in diaspora segments.

There are noteworthy studies on the topic that highlight the significance of the COO effect on consumer buying decisions (Kala, Devkant & Dhani Shankar Chaubey, 2016). The factors include the nature of the product, including demographic characteristics and the global exposure of consumers. Another related article on the evolution of Indian consumer behaviour, published by RedPencil (2023), highlights the dominance of e-commerce, health and wellness in purchase decisions. Customers prefer price discounts when making purchase decisions (Patel, Preyya, 2023), while a study by Dalmia, P& Goel. V (2023) identifies that the quality factor is the standalone factor for purchase decisions. Furthermore, the study also identifies that in India, unbranded spices are popular due to their easy availability of spices. Focusing on the exporting of spices, Babu, Hari P (2017) identifies that India is turning towards exporting processed and semi-processed commodities.

Research Problem and Knowledge Gap

Despite these contributions, a significant knowledge gap remains. The review of literature reveals three key gaps:

- Lack of integration between macro-level export trends and micro-level consumer behaviour.
- Limited focus on diaspora consumers, particularly NRIs as a distinct market segment.
- Absence of comparative analysis of consumer preferences across different product categories (whole spices vs. nutraceuticals, essential oils, oleoresins).

Existing studies largely focus either on domestic consumer behaviour or on macro-level export trends, with limited integration of both perspectives. In particular, there is a lack of empirical research examining how NRIs evaluate and choose between different categories of Indian spice products- such as whole spices, nutraceuticals, essential oils and oleoresins- within the context of global markets. The role of factors such as cultural nostalgia, perceived health benefits, product quality, branding and accessibility in shaping consumer preferences and purchase behaviour among NRIs remains insufficiently explored.

This study accordingly seeks to address this gap by analysing the consumer preferences and purchase behaviour of NRIs with respect to these product categories. By linking macro-level export dynamics with micro-level consumer decision-making, the study aims to provide a more comprehensive understanding of demand patterns in diaspora markets. The findings are expected to contribute to both academic literature and policy discussions by offering insights that can support targeted marketing strategies, product innovation and export promotion efforts in the Indian spice sector.

Objective of the Study

Based on the review of the literature analysed, the following objectives have been framed for the study.

1. To identify and analyse the key factors influencing consumer preferences for Indian spices and related products among Non-Resident Indians.
2. To examine the purchasing behaviour of NRIs with respect to Indian spices, nutraceuticals, essential oils and oleoresins.
3. To assess the market potential of Indian spice products in NRI markets based on consumer preferences and purchasing patterns.

Conceptual Framework

The study proposes that consumer preference and purchase behaviour among NRIs are influenced by the interaction of the following factors:

1. Cultural Factors – (a) Food habits and traditions (b) Nostalgia and emotional attachment (c) Country-of-origin perception
2. Product-related Factors – (a) Quality and safety standards (b) Product type (whole vs. processed) (c) Brand image and packaging
3. Health Consciousness- (a) Awareness of medicinal benefits, (b) Preference for natural and functional foods, (c) Demand for nutraceuticals.

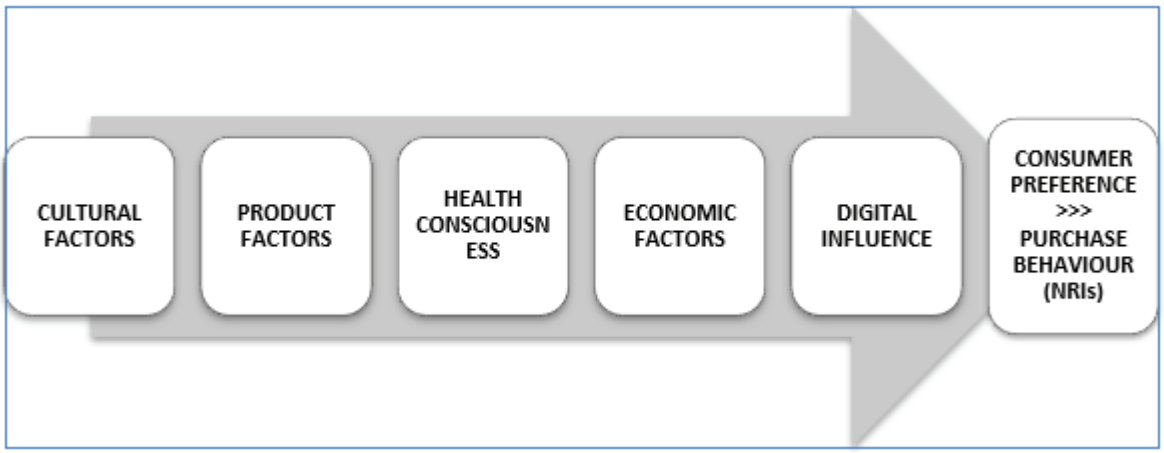


Figure 1. Consumer preference and purchase behaviour among NRIs.

Source: Author.

4. Economic Factors- (a) Price sensitivity (b) Availability and accessibility (c) Perceived value.
5. Digital and Social Influence – (a) E-commerce accessibility (b) Social media exposure (c) Online reviews and recommendations.
6. Outcome Variable – Purchase Behaviour – (a) Product choice (b) Frequency of purchase (c) Brand preference (d) Category preference.

Hypothesis

(H_1): Factors such as Brand, Quality, Health consciousness and social media influence significantly affect the purchase decisions of NRIs with respect to Indian spice products.

(H_0) There is no significant relationship between these factors and purchase decisions.

RESEARCH METHODOLOGY

To accomplish the objectives identified for the study and to analyse the buying behaviour of NRI customers towards Indian Spices, the following methodology was implemented through a comprehensive survey of identified respondents. The purpose of the study was to evaluate market potential and to comprehend consumer behaviour of NRI's towards Indian Spices.

The study attempts to investigate how factors like culture, health benefits, product quality, variety, sustainability, price and brand reputation impact customer choices. The study proposes to provide effective insights that can help marketers of spices to strategise their activities and improve consumer engagement.

Table 1. Research methodology adopted for the study

Particulars	Description
Research Methodology	Descriptive Research
Sampling Methods	Probability sampling
Sampling Technique	Judgmental Sampling (this is a methodological limitation as only NRI's are being identified as respondents for the study.
Data Collecting Instruction	Structured Questionnaire
Sampling Size	384 Respondents
Type of data	Primary and Secondary data
Data Analysis, Tool	Chi-Square Test

Data sources: Data for the study include primary and secondary sources. Required primary data was collected through a shared questionnaire and also through telephonic interviews with identified respondents. The study used the cross-sectional descriptive research design and Judgmental Sampling method. (The use of the judgmental sampling method is a methodological limitation, as only NRIs are being identified as respondents for the study. Secondary data was collected from relevant journals and periodicals.

Limitations: Limitations of the study can be attributed to the difference in opinion of the respondents based on their place of residence. The majority of the respondents are NRIs residing in the Persian Gulf countries; only a few respondents are from other countries. Therefore, the geographic concentration may influence the generalisability of the findings.

Survey Design: A structured questionnaire addressing each objective was shared with NRIs who have migrated to other countries.

Sampling Design: The targeted population were those who are NRI's and consumers of Indian Spices, from across the globe.

Sample Size: The sample size of 384 respondents was determined using a standard statistical formula to ensure representativeness at a 95% confidence level. Data were collected through a structured questionnaire administered to Non-Resident Indians. To ensure statistical significance and adequate representation, factors like margin of error and level of confidence were considered.

Data Collection: The Structured questionnaire was distributed through multiple channels, including emails, Google Forms and telephone interviews wherever necessary.

ANALYSIS AND MAJOR FINDINGS

The demographic analysis indicates that the majority of respondents fall within the 36-to 45-year age group. The gender distribution includes 272 female respondents (70.83%) and 112 male respondents (29.16%). This suggests that respondents are likely to be primary household decision-makers, particularly in grocery purchases and are likely to possess prior purchase experience, leading to informed decision-making. All respondents reported regular involvement in grocery purchasing, reflecting consistent engagement with food-related consumption and cultural preferences.

Collected data reveal that a significant proportion of respondents reported consumption of Nutraceuticals (functional spice-based products) and Oleoresins (concentrated spice extracts). However, spice blends were preferred over whole spices for routine cooking, indicating a shift towards convenience-oriented consumption. The data reveals that the primary factors influencing purchasing decisions are Psychological, Personal, Social and Customer Relationship Management (CRM) systems (in that order) score highest (46%). Based on the responses, it can be concluded that Psychological, Personal, Social, and Cultural factors play an important role in influencing purchase decisions. Where Psychological, Personal and Social factors remain common influences, which relate to culture.

With reference to Nutraceuticals and Oleoresin, the data reveals that the majority of respondents focus and prioritise (1) Actual sourcing of the spice (natural), (2) Geographical area from where the spice is sourced, as key factors, which may be considered as psychological, social and cultural factors while choosing a spice product. The majority of the respondents agree that purchase action triggers during the 'Communications situation' (content, blog, advertisement, promotion).

Collected data reveal that the primary influencing factors for purchase decisions are (1) Quality of the Spice, followed by (2) Social media and influencer recommendations, (3) Health awareness, and (4) Brand image. Interestingly, price was not a dominant determinant, suggesting that NRIs may prioritise quality, trust and health benefits over cost considerations. Broad factor grouping revealed that psychological, personal, social and cultural factors collectively contributed to the highest influence (46%).

Product-Specific Insights: For nutraceuticals and oleoresins, the most important determinants were Natural sourcing (authenticity) and Geographical origin of spices. These factors reflect deeper influences related to cultural attachment, perceived authenticity and health consciousness.

Role of communication and Digital Influence: The findings indicate that purchase decisions are often triggered during the 'communication stage', including advertisements, social media content, blogs and promotions. This highlights the growing importance of digital marketing and online engagement in shaping NRI consumer behaviour.

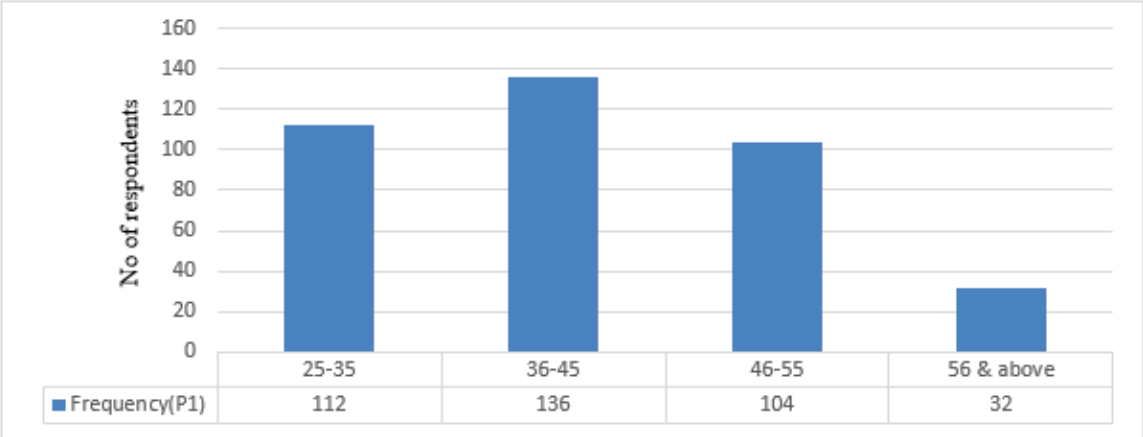


Figure 2. The age distribution of respondents.

Source: Survey Data

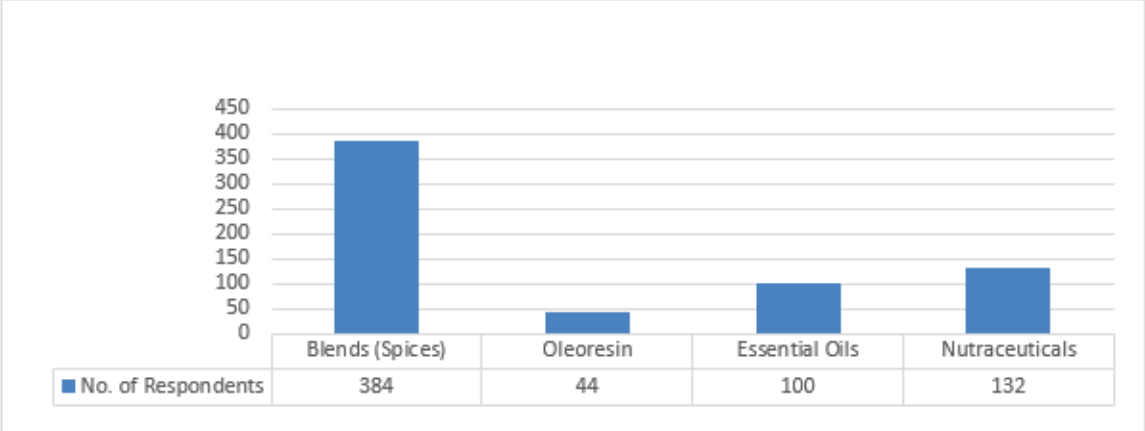


Figure 3. Age distribution of respondents

Source: Survey Data

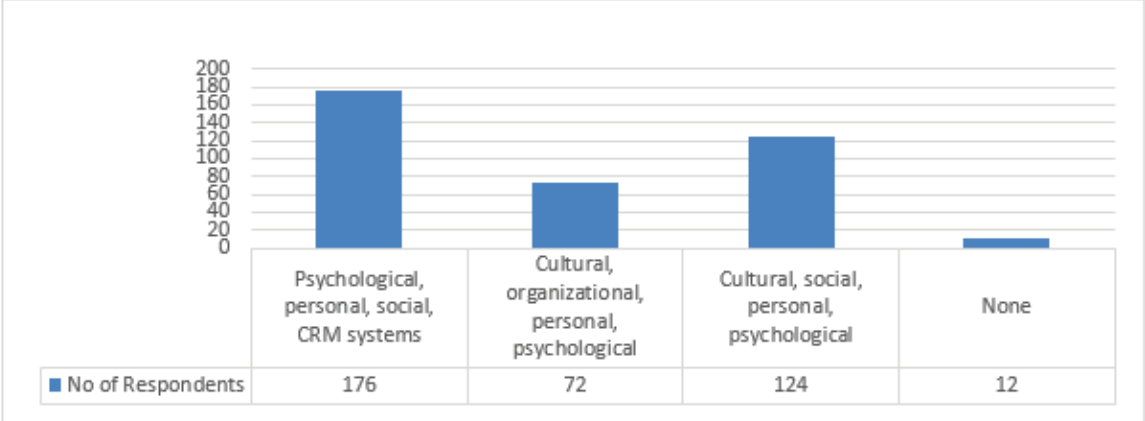


Figure 4. Factors influencing purchase decisions.

Source: Survey Data

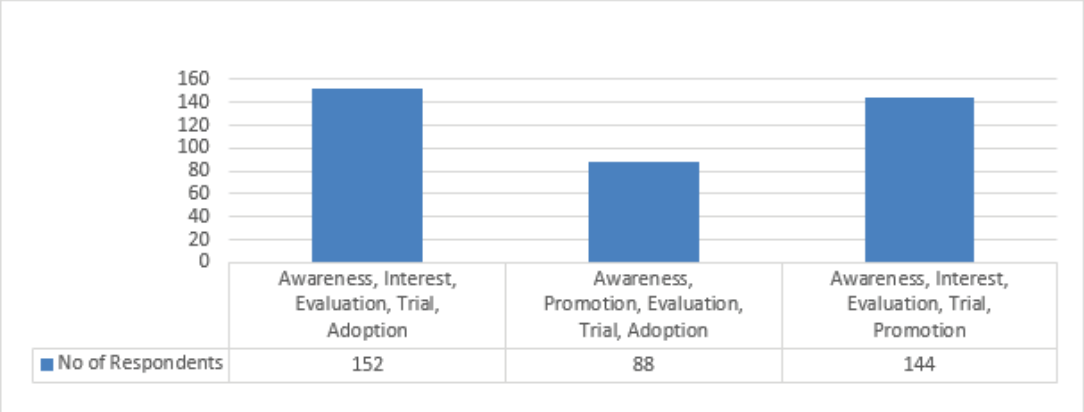


Figure 5. Buying process.

Source: Survey Data

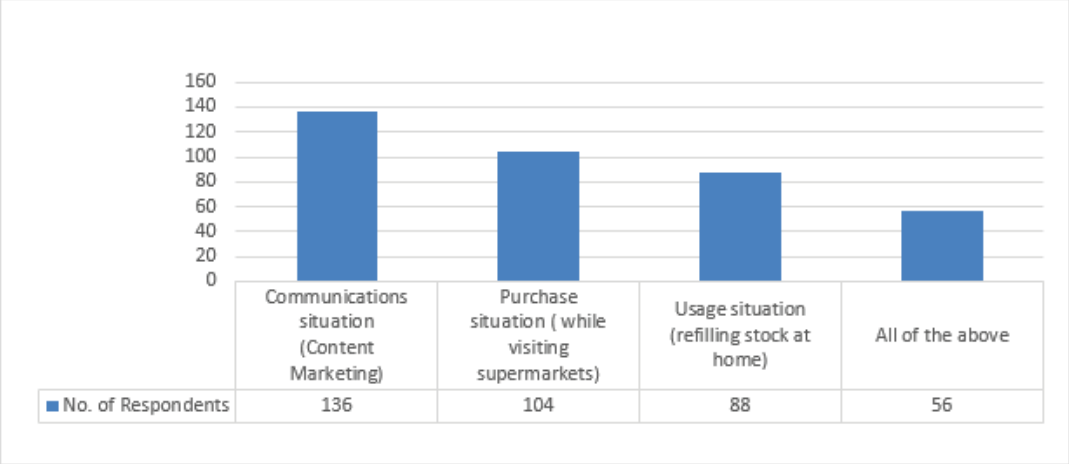


Figure 6. Purchase action triggers.

Source: Survey Data

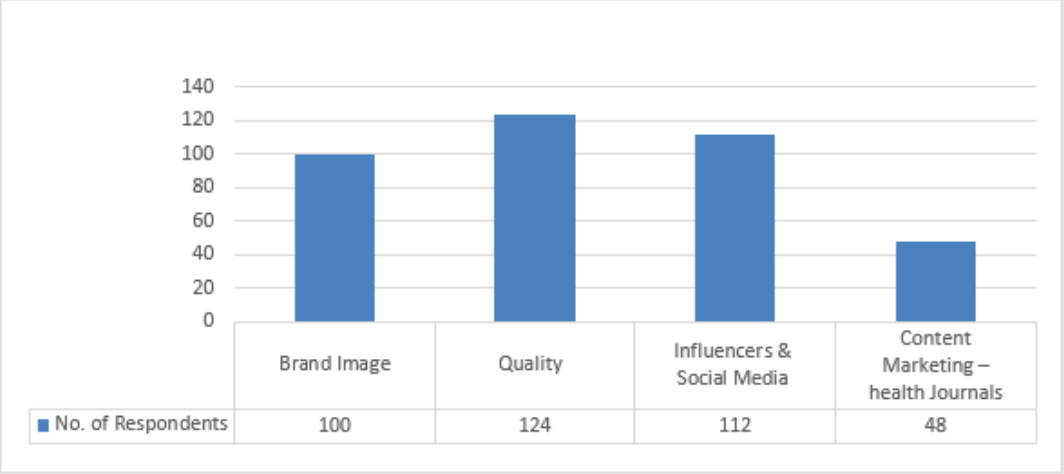


Figure 7. Preference factor in purchase decision.

Source: Survey Data

Table 2. Chi-Square Test

	Observed	Expected	O-E	(O-E)^2	(O-E)^2/E
Consumers consider brand names	100	96	4	16	0.17
Consumers consider quality	124	96	28	784	8.17
Consumers are influenced by social media and influencers	112	96	16	256	2.67
Consumers purchase spices based on cultural affinity	48	96	-48	2304	24.00
				3360	35.00
Calculated value	35	Therefore, the result is significant at $p<0.05$			

Source: Survey Data

	Value	*p*	Df	Asymp.Sig.
Pearson Chi-Square	35	0.05	3	1.218e-7(0.000012%)

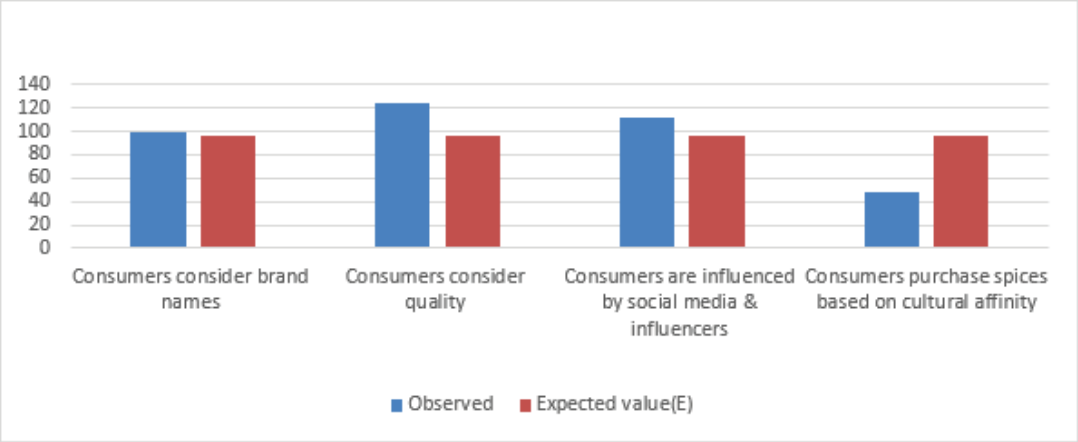


Figure 8. Visual of the chi-square test.

Source: Survey Data

The Pearson's Chi-square statistic is 35, and the p-value is 1.218e-7; significance level (α): 0.05. Therefore, since p<0.05, the null hypothesis cannot be accepted. This indicates a statistically significant association between influencing factors (brand, quality, health and social media) and purchase decisions. The critical value at 95% confidence level is 7.8147, and since 35> 7.8147, the result is significant. The effect size (Phi coefficient) is observed to be moderate, suggesting a meaningful but not extremely strong association. It can be concluded that there exists a significant and moderate relationship between key influencing factors and purchase behaviour among NRIs. It also reveals that the category variables highly correlate with each other.

Interpretation: The *p*-value (1.218e-7) indicates that the chance of a type 1 error is small (0.000012%), which is less than the calculated value. Therefore, H_0 is rejected. The test statistic equals 35, which is not in the 95% region of acceptance (7.8147). Further, the observed effect size of phi is medium. This reveals that the magnitude of the difference between observed and expected data is medium.

Interpretation: While the Chi-square test established a significant association between variables, regression analysis provides deeper insight into the magnitude and direction of influence, confirming that product quality is the most dominant factor influencing purchase behaviour, followed by social media influence

Table 3. Regression summary

Model	R	R Square	Adjusted R Square	Std. error of the estimate
1	0.776	0.602	0.598	0.412

Source: Survey Data

Table 4. ANOVA table

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	98.432	4	24.608	145.32	0.000
Residual	65.211	379	0.172		
Total	163.643	383			

Source: Survey Data

and health consciousness. A multiple regression analysis was conducted to examine the influence of brand image, product quality, health consciousness and social media influence on the purchase behaviour of NIRs toward Indian spice products. The regression model was found to be statistically significant:

- $R^2 = 0.602$, indicating that approximately 60.2% of the variance in purchase behaviour is explained by the independent variables
- The Adjusted $R^2 = 0.598$ confirms the model's robustness

The ANOVA results further support the model's validity:

- $F(4, 379) = 145.32$, $p < 0.001$

This indicates that the model provides a good fit to the data and the predictors jointly influence purchase behaviour. Furthermore, the regression coefficients reveal the relative importance of each factor.

- Product Quality ($\beta = 0.398$, $p < 0.001$)
  → Identified as the strongest predictor of purchase behaviour
  → Suggests that NRIs prioritise quality over other factors
- Social Media Influence ($\beta = 0.281$, $p < 0.001$)
  → Demonstrates the significant role of digital platforms, influencers, and online content
- Health Consciousness ($\beta = 0.236$, $p < 0.001$)
  → Indicates increasing preference for functional and health-oriented products
- Brand Image ($\beta = 0.172$, $p < 0.001$)
  → Shows a moderate but significant effect, particularly in international markets

It may therefore be observed that all independent variables are positive and statistically significant, confirming that a higher perception of quality, health benefits, brand value and digital influence increases the likelihood of purchase of spices. The results support the alternative hypothesis (H_1), indicating that brand image, product quality, health consciousness and social media influence have a significant impact on purchase decision behaviour among NRIs.

Factor Analysis (Exploratory Factor Analysis-EFA)

The model shows a good fit and confirms the theoretical framework's validity. The findings align with established consumer behaviour theories:

1. Consumer decision-making Model: Quality and health reflect the evaluation stage.
2. Country-of-origin effect – Importance of sourcing and geography.

Table 5. Coefficients table

Model	Unstandardised Coefficients (B)	Std. Error	Standardised Coefficients (Beta)	t	Sig.
(Constant)	0.842	0.215		3.91	0.000
Brand Image	0.184	0.052	0.172	3.54	0.000
Product Quality	0.356	0.061	0.398	5.84	0.000
Health Consciousness	0.221	0.058	0.236	3.80	0.000
Social Media Influence	0.267	0.055	0.281	4.85	0.000

Source: Survey Data

Table 6. KMO and Bartlett's test

TEST	VALUE
Kaiser-Meyer-Olkin (KMO) Measure	0.842
Bartlett's Test of Sphericity (Chi-square)	1567.23
Df	120
Sig.	0.000

Source: Survey Data

Interpretation:

The test reveals KMO> 0.8, which shows that sampling adequacy is good. Furthermore, Bartlett's test reveals that Factor analysis is appropriate.

Table 7. Rotated component matrix (factor loadings)

Variables	Quality	Social Influence	Health	Brand
Product Quality	0.812			
Safety Standards	0.784			
Authenticity	0.766		0.412	
Social Media		0.821		
Influencer Impact		0.795		
Online Reviews		0.763		
Health Benefits			0.802	
Natural Ingredients			0.778	
Brand Trust				0.804
Packaging				0.742

Source: Survey Data

Interpretation:

The Factor loading reveals four clear constructs, namely: (1) Quality, (2) Social Influence, (3) Health Consciousness, and (4) Brand Image.

3. Health behaviour theory – Preference for nutraceuticals.
4. Social influence theory – Impact of social media and influences.

Table 8. Dependent variable: Purchase behaviour (PB)

Path	Coefficient (β)	p-value	Result
Quality → Purchase Behaviour	0.41	0.000	Significant
Social Influence → Purchase Behaviour	0.29	0.000	Significant
Health Consciousness → Purchase Behaviour	0.24	0.000	Significant
Brand Image → Purchase Behaviour	0.18	0.000	Significant

Source: Survey Data

Table 9. Model fit indices

Fit Index	Value	Recommended Threshold
Chi-Square/df	2.34	<3
RMSEA	0.052	<0.08
CFI	0.931	>0.90
TLI	0.918	>0.90

Source: Survey Data

FINDINGS AND SUGGESTIONS

The study provides important insights into the consumer preferences and purchase behaviour of NRIs with respect to Indian spice products.

1. Dominance of Product Quality: Product quality emerged as the most influential factor affecting purchase behaviour. Consumers place high importance on authenticity, safety standards and overall product reliability. This aligns with the increasing demand for premium and certified food products in international markets.
2. Significance of Social and Digital Influence: Social media, influencers and online reviews significantly shape consumer decisions. The findings indicate that digital platforms act as key decision triggers, especially during the evaluation stage of purchase behaviour.
3. Growing Health Consciousness: Health-related factors play a crucial role, particularly in the

consumption of nutraceuticals and processed spice products. Consumers demonstrate a preference for natural, functional and wellness-oriented products, reflecting a shift toward preventive health behaviour.

4. Moderate Role of Brand Image: While brand image positively influences purchase decisions, its impact is relatively weaker compared to quality and health considerations. However, in global markets, branding remains important for ensuring trust and consistency.
5. Preference for Convenience-Oriented Products: The study reveals a noticeable shift toward spice blends and processed forms, indicating changing lifestyles and the demand for convenience.
6. Cultural and Psychological Influence: Consumption patterns are deeply rooted in cultural identity and nostalgia. NRIs continue to maintain strong connections with Indian food habits, influencing their purchasing choices.

Managerial Implications

Strategic Implications for Industry and Policy

1. Focus on Quality Assurance and Certification: Exporters should prioritise quality control, certification (e.g., organic, safety standards), and traceability. Emphasising authentic sourcing and Geographical Indication (GI) can enhance consumer trust.
2. Leverage Digital Marketing and Influencer Engagement: Companies should invest in social media marketing, influencer collaborations and targeted digital campaigns to effectively reach NRI consumers. Content-driven strategies (recipes, health benefits) can further enhance engagement.
3. Develop Health-Oriented Product Lines: There is strong potential for expanding nutraceuticals, functional foods and wellness products. Marketing communication should highlight health benefits and traditional medicinal value.
4. Strengthen Brand Positioning in Global Markets: Building a strong brand identity through packaging, storytelling and consistency is crucial. Brands should emphasise Indian heritage, authenticity and quality differentiation.
5. Promote Value-Added Products: Given the preference for convenience, firms should expand their range of offerings in (a) spice blends, (b) ready-to-use formats, (c) processed derivatives (oleoresins, essential oils).
6. Target NRI Segments Strategically: businesses should adopt region-specific strategies, especially for Gulf countries where the demand is concentrated. Understanding local consumption patterns can improve market penetration.
7. Policy-Level Support: Government bodies (e.g, Spices Board India) should promote branding and export awareness campaigns, support small exporters in meeting international standards, and facilitate market intelligence on diaspora consumption trends.

Understanding Consumer Behaviour is an important factor and vital for any business. It helps in understanding market strength and setting realistic sales targets. One of the primary outcomes revealed by the study was the ability to understand the future market position of Indian Spices. The study identifies that psychological, personal, social and CRM factors score highest for influencing the purchase decision among NRI customers. The findings further highlight that awareness through content marketing seems to effectively promote nutraceuticals and essential oils in international markets.

It is noteworthy that a large segment of respondents consider Quality, Influencers and Social media, followed by Brand Image that drive purchase decisions. Another factor is that all respondents (384) are NRI's of which 70.83% are women.

Furthermore, it was observed through the study that the NRI's seem to prefer spice blends for cooking in comparison to the whole spices that are included in traditional Indian cuisine. This has been highlighted in a study by Babu, Hari P (2017). The awareness about nutraceuticals and essential oils is getting popular among the NRI's. However, it is observed that there is a concerning decline in the purchase of whole spices by the NRI customers, which indicates potential

challenges for the marketers of spices in maintaining customer engagement and loyalty.

It is therefore suggested that marketers of spices should use digital marketing tools to promote Indian Spices and their medicinal benefits. This can help strengthen and drive future growth of the industry.

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