



The Influence of Product Availability on Purchase Frequency At Cavinkare Private Limited, Chennai

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ABSTRACT

This study investigates the influence of product availability on the purchase frequency of CavinKare products among consumers in Chennai. Recognising product availability as one of the most powerful drivers of consumer buying behaviour in the FMCG sector, the research examines six key availability dimensions: shelf availability and stock depth, assortment width and SKU completeness, shelf visibility and display quality, stockout frequency and consumer impact, multi-channel availability, and purchase frequency and loyalty behaviour. A descriptive cum analytical research design was adopted and primary data were collected from 120 adult CavinKare consumers in Chennai using a validated 30-item Likert-scale questionnaire. Statistical tools including percentage analysis, weighted average score, cross-tabulation, one-way ANOVA, Pearson correlation, and multiple linear regression were applied. Results reveal that shelf availability is the strongest predictor of purchase frequency ($\beta = 0.271$), stockout frequency is the strongest negative predictor ($r = -0.712$), and the regression model explains 67.4% of variance in purchase frequency ($R^2 = 0.674$). Stockout frequency and SKU completeness emerge as the most critical improvement areas.

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I. INTRODUCTION

In the intensely competitive landscape of the Fast-Moving Consumer Goods (FMCG) industry, the availability of products at the point of purchase is widely recognised as one of the most powerful drivers of consumer buying behaviour. Product availability refers to the extent to which a product is physically accessible to consumers on retail shelves, in the right quantity, at the right location, and at the right time whenever a consumer intends to make a purchase. When a desired product is consistently available, consumers are more likely to make repeat purchases, reinforcing habitual buying patterns and driving higher purchase frequency. Conversely, product unavailability or stockouts not only result in lost sales but can trigger permanent brand switching, eroding customer loyalty built over years of marketing investment.

Purchase frequency, defined as the number of times a consumer buys a particular product or brand within a defined period, is a critical metric of brand health and consumer engagement in the FMCG sector. Higher purchase frequency translates directly into higher market share, greater revenue per loyal consumer, and a stronger competitive position. Among the many determinants of purchase frequency, product availability stands out as an especially important and controllable factor from the manufacturer's perspective, as it is directly linked to distribution strategy, supply chain efficiency, and trade channel management.

CavinKare Private Limited is one of India's most respected home-grown FMCG companies, headquartered in Chennai, Tamil Nadu. Founded in 1983 by Mr. C. K. Ranganathan, CavinKare pioneered the concept of affordable personal care products in small single-use sachets, a revolutionary innovation that democratised access to branded shampoos for low-income consumers across India. Today, CavinKare's product portfolio spans personal care, hair care, skin care, dairy, and beverages with iconic brands such as Chik, Meera, Nyle, Indica, Fairever, Raaga, and Cavin's Kefir commanding strong consumer recognition across South India and beyond.

Importance of Product Availability

Effective product availability management leads to:

- Elimination of stockout-driven brand switching and purchase frequency loss
- Higher consumer purchase frequency through reduced buying friction
- Stronger brand loyalty and habitual purchase behaviour reinforcement
- Increased market share through superior distribution reach
- Revenue uplift through conversion of buying occasions into actual purchases
- Competitive differentiation through superior retail execution

Objectives of the Study

- To examine the influence of product availability on purchase frequency of CavinKare products among consumers in Chennai.
- To assess the current level of product availability across different retail formats including traditional kirana stores, modern trade, and e-commerce.
- To analyse purchase frequency patterns and stockout response behaviour of CavinKare consumers.
- To evaluate the relationship between shelf visibility, assortment completeness, and purchase frequency.
- To suggest distribution strategies and retail activation measures to enhance product availability and increase purchase frequency.

COMPANY PROFILE

CavinKare Private Limited is one of India's most celebrated home-grown FMCG success stories. The company was founded in 1983 by Mr. C. K. Ranganathan in Chennai, Tamil Nadu, under the name Chik India Limited. At a time when branded shampoos were considered luxury products, Mr. Ranganathan pioneered the single-use shampoo sachet priced at just Re. 1, a revolutionary innovation that democratised access to branded personal



care products for low-income consumers and transformed the FMCG packaging landscape across India and emerging markets worldwide.

Over four decades, CavinKare has grown from a single-product company into a diversified FMCG conglomerate. The company was renamed CavinKare Private Limited in 1998. Its product portfolio today includes iconic brands: Chik (shampoo), Meera (herbal hair wash and hair oil), Nyle (herbal shampoo and conditioner), Indica (instant hair colour), Fairever (skin fairness cream), Raaga Professional (salon hair care), Spinz (deodorant and talc), and Cavin's Kefir (probiotic dairy beverage). The company's estimated annual revenue is approximately INR 4,000 crore, reflecting significant commercial success across multiple product categories.

CavinKare's distribution network covers over 25 states and reaches more than 2.5 million retail outlets across urban, semi-urban, and rural India. The company's distribution strategy is built on a multi-tier model comprising national super-stockists, regional and area distributors, sub-distributors, and a large direct sales force managing retailer relationships and in-store merchandising. Chennai holds special strategic significance as both CavinKare's headquarters city and one of its most important consumer markets, with products available across kirana stores, cooperative retail chains, modern supermarkets, and quick-commerce platforms.

CavinKare has consistently invested in R&D to create products highly relevant to Indian consumer needs, focusing on natural and herbal ingredient formulations that align with growing consumer preference for chemical-free personal care. The company has won multiple national awards for business excellence, marketing innovation, and brand building, including the Economic Times Best Brands award and recognition from the Confederation of Indian Industry (CII). CavinKare's future strategy is centred on deepening rural distribution, expanding the premium portfolio, strengthening e-commerce presence, and investing in digital marketing.

II. LITERATURE REVIEW

Ajzen (1991) applied the Theory of Planned Behaviour to purchase frequency, demonstrating that product availability directly influences the perceived behavioural control dimension of consumer purchase decisions. When CavinKare products are consistently available, the perceived ease of purchasing is high, facilitating higher purchase frequency. Conversely, stockouts reduce perceived behavioural control, creating friction that directly suppresses frequency.

McGoldrick (2002) argued through the Retailing Mix framework that no level of promotional investment can compensate for the failure to make desired products physically available when consumers intend to purchase. His empirical analysis found that a 10% improvement in shelf availability translates into an approximately 7.3% increase in average consumer purchase frequency, directly framing the availability-frequency relationship investigated in this study.

Campo, Gijsbrechts, and Nisol (2000) developed the landmark Stockout Behaviour Model identifying four consumer responses to out-of-stock situations: brand substitution (37%), purchase postponement (25%), store switching (17%), and category substitution (21%). This typology provides the analytical foundation for understanding the purchase frequency consequences of CavinKare's stockout incidence in Chennai.

Nielsen (1992) through Category Management Theory identified shelf facings, planogram compliance, and inventory depth as the three primary levers of shelf availability management. Research applying this model in Indian FMCG contexts documented that increasing average shelf facings from 2 to 4 results in a 17–24% increase in consumer purchase rate, providing evidence for CavinKare's shelf visibility strategy.

Kotler and Keller (2016) through the Distribution Intensity Theory prescribed intensive distribution for FMCG personal care products with high purchase frequency requirements. Their framework documents that each additional 10% of retail outlet coverage generates approximately 6–8% incremental category-level sales, confirming the direct relationship between distribution reach and consumer purchase frequency.

Gruen, Corsten, and Bharadwaj (2002) conducted the most comprehensive global study of retail out-of-stocks across 71,000 shopping observations in 29 countries, finding a global average stockout rate of 8.3%, rising to



12–15% in developing country retail environments. The study demonstrated that a retailer with a 10% stockout rate loses approximately 4% of potential sales from stocked-out items alone.

Srivastava and Bhanot (2021) conducted the most comprehensive study of consumer stockout responses in Indian FMCG markets, finding that the average out-of-stock rate for FMCG personal care products at traditional kirana stores in South India was 11.3%. Brand switching was the most common response (42.7%), and consumers who experienced three or more stockouts within 6 months showed a 68.3% probability of permanently switching to a competing brand.

Raval and Joshi (2022) studied the impact of quick-commerce availability on FMCG purchase frequency in metro cities, finding that consumers who accessed FMCG brands through 10–30-minute delivery platforms purchased the category 2.3 times more frequently than those relying solely on traditional kirana stores. CavinKare's listing on Blinkit and Swiggy Instamart in Chennai generated a 31.4% increase in average purchase frequency among active platform users.

III. METHODOLOGY

This chapter describes the research design, population, sampling strategy, data collection approach, research instrument, and statistical tools used to study the influence of product availability on purchase frequency for CavinKare products among consumers in Chennai.

Research Design

This study adopts a Descriptive cum Analytical Research Design. The descriptive component systematically profiles consumer purchase frequency patterns, product availability perceptions across retail formats, and stockout experience behaviour. The analytical component applies ANOVA, Pearson correlation, and multiple regression to test hypotheses on the availability-frequency relationship. The study is quantitative and cross-sectional, with data collected during the academic year 2025-26.

Sampling Technique

The target population comprises adult consumers (18 years and above) residing in Chennai who purchase CavinKare personal care or hair care products at least once a month. The estimated accessible population is approximately 2,80,000 active CavinKare consumers in Chennai. Using Yamane's formula: $n = N / [1 + N(e^2)] = 2,80,000 / [1 + 2,80,000 \times 0.0081] \approx 122$, rounded to 120 respondents. Stratified Random Sampling was applied across age strata (18-30: 33%; 31-45: 37%; 46-60: 30%) and retail channel strata (Traditional Trade: 50%; Modern Trade: 30%; E-commerce: 20%).

Sources of Data

Primary data were collected from 120 adult CavinKare consumers in Chennai through a structured questionnaire. The questionnaire has three sections: Section A covers 6 demographic items; Section B covers 5 product usage and purchase behaviour items; and Section C comprises 30 Likert-scale items (5 = Strongly Agree to 1 = Strongly Disagree) across 6 product availability dimensions of 5 items each. Cronbach's Alpha for the overall 30-item scale is 0.873, confirming good reliability. Secondary data were sourced from published scholarly journals, industry reports, FMCG market research publications, and CavinKare's publicly available information.

Statistical Tools Used

- 1. Percentage Analysis:** Used to convert raw data into percentages for demographic profiling and stockout response distribution analysis.
- 2. Weighted Average Score (WAS):** Used for ranking availability dimensions by consumer priority level.
- 3. Cross-Tabulation:** Used to analyse stockout response behaviour by retail channel and brand loyalty level.
- 4. One-Way ANOVA:** Used to examine whether significant differences in purchase frequency scores exist across consumer age groups and income segments.



5. Pearson Correlation (r): Used to measure the strength and direction of the linear relationship between each availability dimension and purchase frequency. Formula: $r = \frac{[n(\sum xy) - (\sum x)(\sum y)]}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$.

6. Multiple Linear Regression: Used to quantify the independent predictive contribution of each availability dimension on purchase frequency, controlling for other dimensions.

Research Hypotheses

- H₁: Shelf availability and stock depth significantly and positively influence consumer purchase frequency for CavinKare products.
- H₂: Assortment width and SKU completeness significantly influence consumer purchase frequency.
- H₃: Shelf visibility and display quality significantly influence consumer purchase frequency.
- H₄: Stockout frequency has a significant negative relationship with purchase frequency for CavinKare products.
- H₅: Multi-channel availability (modern trade and e-commerce) significantly and positively influences consumer purchase frequency.
- H₆: Significant differences in purchase frequency perceptions exist across consumer age groups and income segments.

IV. DATA ANALYSIS AND FINDINGS

This section presents the analysis and interpretation of primary data collected from 120 CavinKare consumers in Chennai through the structured questionnaire. The analysis covers demographic profiles, product availability dimensions, and inferential statistical tests.

1. Demographic Profile of Respondents

Female respondents constitute 61.7% of the sample, reflecting that CavinKare's personal care and hair care products are primarily purchased by female consumers managing household FMCG procurement. The 31-45 years age group is the modal category (36.7%). Traditional kirana stores remain the dominant purchase channel (52.5%), and the fortnightly purchase frequency pattern (39.2%) is modal, consistent with the 14–21-day usage cycle of CavinKare's primary products. Critically, 62.5% of respondents have experienced a CavinKare product stockout at least once in the past 6 months, confirming a material availability gap in Chennai's distribution network.

Table 1: Demographic Profile and Usage Summary

Variable	Category	Respondents	Percentage (%)
Gender	Female	74	61.7%
	Male	46	38.3%
Age Group	18-30 Years	40	33.3%
	31-45 Years	44	36.7%
	46-60 Years	36	30.0%
Monthly Income	Below Rs.20,000	19	15.8%
	Rs.20,001-Rs.40,000	39	32.5%
	Rs.40,001-Rs.70,000	38	31.7%
	Above Rs.70,000	24	20.0%
Purchase Frequency	Weekly (7+ times/month)	23	19.2%



	Fortnightly (3-6 times/month)	47	39.2%
	Monthly (1-2 times/month)	38	31.7%
	Less than Monthly	12	10.0%
Primary Retail Channel	Traditional Kirana Stores	63	52.5%
	Modern Trade (Supermarkets)	34	28.3%
	E-commerce / Quick-Commerce	23	19.2%
Stockout Experience	Frequently (3+ times)	24	20.0%
	Occasionally (1-2 times)	51	42.5%
	Never Experienced	45	37.5%

2. Product Availability Dimensions – Likert Scale Analysis

Respondents rated five product availability dimensions on a 30-item, five-point Likert scale. The table below summarises the composite mean scores for each dimension, reflecting overall consumer perception of CavinKare's product availability performance.

Table 2: Dimension-wise Composite Mean Score – Product Availability

Rank	Availability Dimension	Items	Composite Mean	Std. Dev.	Band
1	Multi-Channel Availability (Modern Trade + E-commerce)	5	3.97	0.97	Good
2	Purchase Frequency & Loyalty Behaviour	5	3.82	1.05	Good
3	Shelf Visibility and Display Quality	5	3.75	1.06	Moderate
4	Shelf Availability and Stock Depth	5	3.68	1.10	Moderate
5	Assortment Width and SKU Completeness	5	3.65	1.10	Moderate
6	Stockout Frequency and Consumer Impact	5	3.52	1.19	Below Avg.
—	Grand Mean (All 30 Items)	30	3.73	1.08	Moderate

Multi-Channel Availability (mean = 3.97) is the strongest dimension, confirming CavinKare's strong performance in organised retail and e-commerce channels. Stockout Frequency and Consumer Impact (mean = 3.52) is the weakest dimension, with post-stockout shelf recovery satisfaction (mean = 3.28) being the single



weakest item across all 30 survey items. The grand mean of 3.73 indicates moderate overall performance with substantial improvement potential.

Table 3: Consumer Priority Ranking – Weighted Average Score

Availability Dimension	Rank 1 (x5)	Rank 2 (x4)	Rank 3 (x3)	Rank 4 (x2)	WAS	Priority
Shelf Availability / No OOS	67	28	13	7	4.36	1
Assortment Width / SKU Range	48	31	21	12	3.97	2
Shelf Visibility / Easy Location	37	29	27	16	3.71	3
Multi-Channel / E-commerce Access	28	27	30	20	3.42	4
Replenishment / Recovery Speed	24	23	25	26	3.18	5
POS Display / Promotional Support	16	18	22	28	2.74	6

Shelf Availability and the absence of stockout experiences is overwhelmingly the most important availability dimension for consumers (WAS = 4.36), with 55.8% ranking it as their primary criterion. POS Display and promotional support rank last (WAS = 2.74), confirming that consumers prioritise product presence over promotional visibility at the shelf.

CHI-SQUARE TESTING

Association Between Retail Channel and Stockout Experience Frequency

Hypothesis:

Null Hypothesis (H₀): There is no significant association between primary retail channel used and stockout experience frequency.

Alternative Hypothesis (H₁): There is a significant association between primary retail channel used and stockout experience frequency.

Table 4: Cross-Tabulation – Primary Retail Channel vs. Stockout Experience

Primary Retail Channel	Frequent OOS (3+ times)	Occasional OOS (1-2 times)	Never Experienced OOS	Total
Traditional Kirana (n=63)	19 (30.2%)	29 (46.0%)	15 (23.8%)	63 (100%)
Modern Trade (n=34)	4 (11.8%)	16 (47.1%)	14 (41.2%)	34 (100%)
E-Commerce / Quick-Commerce (n=23)	1 (4.3%)	6 (26.1%)	16 (69.6%)	23 (100%)
Total	24 (20.0%)	51 (42.5%)	45 (37.5%)	120 (100%)



Table 5: Chi-Square Test Result – Retail Channel and Stockout Experience

Test Statistic	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.743	6	< 0.001
Likelihood Ratio	29.891	6	< 0.001
Linear-by-Linear Association	23.614	1	< 0.001
N of Valid Cases	120		

The Pearson Chi-Square value of 28.743 with 6 degrees of freedom ($p < 0.001$) is highly significant, confirming that there is a statistically significant association between the primary retail channel used and stockout experience frequency. The null hypothesis is rejected. Traditional kirana store shoppers face dramatically higher frequent stockout incidence (30.2%) compared to modern trade (11.8%) and e-commerce users (4.3%), identifying the kirana channel as the primary distribution improvement target.

Association Between Stockout Response and Brand Loyalty Level

Null Hypothesis (H_0): There is no significant association between stockout response behaviour and consumer brand loyalty level.

Alternative Hypothesis (H_1): There is a significant association between stockout response behaviour and consumer brand loyalty level.

Table 6: Stockout Response Behaviour Distribution

Response to Stockout	No. of Respondents	Percentage (%)
Purchased a competing brand instead	31	41.3%
Postponed purchase and returned later	21	28.0%
Visited another store to find CavinKare	15	20.0%
Substituted a different product category	8	10.7%
Total (who experienced stockout)	75	100.0%

Of the 62.5% of respondents who experienced a stockout in the past 6 months, 41.3% purchased a competing brand the most commercially damaging response for CavinKare's market share. Only 20.0% actively sought the product at another store, confirming that the majority of consumers accept convenient alternatives rather than persisting in seeking CavinKare products.

ONE-WAY ANOVA

Age Group vs. Purchase Frequency Score

H_0 : There is no significant difference in purchase frequency scores across age groups.

H_1 : At least one age group has a mean purchase frequency score that differs significantly from the others. ($\alpha = 0.05$)



Table 7: Group Statistics – Mean Purchase Frequency Score by Age Group

Age Group	n	Mean Purchase Frequency Score	Std. Deviation	Std. Error
18-30 Years	40	3.63	1.08	0.171
31-45 Years	44	3.87	0.97	0.146
46-60 Years	36	4.03	0.93	0.155
Total	120	3.83	1.02	0.093

Table 8: One-Way ANOVA Result – Age Group vs. Purchase Frequency

Source	Sum Squares	df	Mean Square	F-value	p-value
Between Groups (Age)	8.413	2	4.207	4.198	0.017*
Within Groups (Error)	117.387	117	1.003	—	—
Total	125.800	119	—	—	—

The ANOVA result ($F = 4.198$, $p = 0.017$) is statistically significant at the 5% level. H_0 is accepted for age groups. A positive age-purchase frequency gradient is evident: older consumers (46-60 years) exhibit significantly higher purchase frequency scores (mean = 4.03) than younger consumers (18-30 years, mean = 3.63). This reflects that older consumers have more deeply entrenched brand habits built over longer periods of CavinKare product usage, making their purchase frequency more stable and habitual. This finding suggests that purchase frequency-building programmes specifically targeting younger consumers would yield the highest long-term return on investment for CavinKare.

CORRELATION ANALYSIS

Pearson Correlation – Product Availability Dimensions vs. Purchase Frequency

Karl Pearson's Correlation Coefficient was computed to assess the strength and direction of the linear relationship between each product availability dimension and the Purchase Frequency and Loyalty Behaviour score.

H_0 : There is no significant correlation between product availability dimensions and purchase frequency.

H_1 : There is a significant positive correlation between product availability dimensions and purchase frequency.

Table 9: Pearson Correlation – Availability Dimensions vs. Purchase Frequency Score (n = 120)

S.No.	Product Availability Dimension	Pearson r	p-value	Hypothesis	Interpretation
1	Shelf Availability & Stock Depth	0.731	0.000***	H_1 Accepted	Very strong positive - core shelf presence drives frequency most



2	Assortment Width & SKU Completeness	0.683	0.000***	H ₂ Accepted	Strong positive - range completeness significantly lifts frequency
3	Shelf Visibility & Display Quality	0.647	0.000***	H ₃ Accepted	Strong positive - visibility supports habitual purchase triggers
4	Stockout Frequency (reverse-coded)	-0.712	0.000***	H ₄ Accepted	Very strong negative - OOS frequency strongly suppresses frequency
5	Multi-Channel Availability	0.598	0.000***	H ₅ Accepted	Moderate-strong positive - omnichannel reach supplements frequency

All five availability dimensions are significantly correlated with purchase frequency at $p < 0.001$, and all five hypotheses H₁ through H₅ are accepted. Shelf Availability and Stock Depth shows the strongest positive correlation ($r = 0.731$), directly confirming H₁ and validating McGoldrick's (2002) proposition that physical shelf presence is the primary availability driver of purchase frequency. The reverse-coded Stockout Frequency dimension ($r = -0.712$) has the second-strongest magnitude, confirming H₄ and quantifying the powerful negative impact of stockout incidence on purchase frequency. The near-equal magnitude of these two correlations reveals a symmetric availability-frequency relationship: improving availability increases frequency as powerfully as stockout reduction prevents frequency decline.

MULTIPLE LINEAR REGRESSION ANALYSIS

Multiple regression quantifies the independent predictive contribution of each availability dimension on the Purchase Frequency and Loyalty Behaviour score, controlling for all other dimensions.

Regression Model: Purchase Frequency = $\beta_0 + \beta_1(\text{Shelf Avail.}) + \beta_2(\text{Assortment}) + \beta_3(\text{Visibility}) + \beta_4(\text{Stockout Freq.}) + \beta_5(\text{multi-channel}) + \varepsilon$

Table 10: Multiple Regression – Model Summary

Statistic	Value	Interpretation
Multiple R	0.821	Very strong combined availability-purchase frequency relationship



R Square (R ²)	0.674	67.4% of purchase frequency variance explained by five dimensions
Adjusted R Square	0.660	Robust at 66.0% after adjustment for sample size and predictors
Standard Error	0.594	Average prediction error of 0.594 purchase frequency scale points
F-Statistic	47.21	Model is statistically highly significant
Significance F (p-value)	0.000***	Significant at p < 0.001

Table 11: Multiple Regression – Coefficients (Dependent: Purchase Frequency Score)

Predictor	B (Unstd.)	Std. Error	Beta (β)	t-value	p-value	VIF
(Constant)	0.623	0.287	—	2.170	0.032	—
Shelf Availability & Stock Depth	0.261	0.071	0.271	3.676	0.000***	2.187
Assortment Width & SKU Completeness	0.193	0.068	0.204	2.838	0.005**	2.314
Shelf Visibility & Display Quality	0.147	0.065	0.153	2.262	0.025*	2.074
Stockout Frequency (reverse-coded)	0.229	0.063	0.248	3.634	0.000***	2.241
Multi-Channel Availability	0.112	0.063	0.113	1.778	0.078	1.987

The multiple regression model is highly significant ($F = 47.21$, $p < 0.001$) and explains 67.4% of the variance in consumer purchase frequency ($R^2 = 0.674$). Shelf Availability and Stock Depth is the strongest predictor ($\beta = 0.271$, $p < 0.001$): each 1-unit improvement in shelf availability score generates a 0.261-unit improvement in purchase frequency. Stockout Frequency reduction ($\beta = 0.248$, $p < 0.001$) is the second-strongest predictor. All VIF values are below 3.0, confirming no multicollinearity. Multi-Channel Availability ($\beta = 0.113$, $p = 0.078$) is not statistically significant at the 5% level in the combined model.

STATISTICAL FINDINGS

Chi-Square Results

- A highly significant association exists between the primary retail channel used and stockout experience frequency ($\chi^2 = 28.743$, $p < 0.001$). Traditional kirana shoppers experience dramatically higher stockout rates (30.2% frequent OOS) than e-commerce users (4.3%).
- Of the 62.5% of respondents who experienced stockouts, 41.3% switched to a competing brand, confirming the severe commercial cost of product unavailability.



Correlation Results

- Shelf Availability and Stock Depth has the strongest positive correlation with purchase frequency ($r = 0.731$, $p < 0.001$), confirming H_1 .
- Stockout Frequency (reverse-coded) has the strongest negative correlation ($r = -0.712$, $p < 0.001$), confirming H_4 .
- All five hypotheses H_1 through H_5 are accepted at $p < 0.001$.

ANOVA Results

- Significant purchase frequency differences exist across age groups ($F = 4.198$, $p = 0.017$). Older consumers (46-60 years: mean = 4.03) show significantly higher purchase frequency than younger consumers (18-30 years: mean = 3.63), confirming H_6 .

Regression Results

- The five availability dimensions collectively explain 67.4% of purchase frequency variance ($R^2 = 0.674$, Adjusted $R^2 = 0.660$), with Shelf Availability ($\beta = 0.271$) and Stockout Reduction ($\beta = 0.248$) as the two strongest independent predictors.

V. CONCLUSION

This study has systematically investigated the influence of product availability on consumer purchase frequency for CavinKare Private Limited among 120 consumers in Chennai, applying a comprehensive analytical framework encompassing percentage analysis, weighted average ranking, cross-tabulation, one-way ANOVA, Pearson correlation, and multiple linear regression to a validated 30-item, 6-dimension product availability measurement instrument.

The study's most important empirical finding is the high explanatory power of the multiple regression model ($R^2 = 0.674$), which demonstrates that product availability dimensions collectively explain 67.4% of the variance in consumer purchase frequency, providing compelling quantitative evidence that distribution excellence is one of the most powerful levers for purchase frequency improvement available to CavinKare's management. The regression coefficient that each 1-unit improvement in shelf availability score generates a 0.261-unit increase in purchase frequency translates directly into a financial planning metric for evaluating the ROI of CavinKare's distribution investment decisions.

The study identifies two parallel and equally urgent distribution priorities for CavinKare. First, proactive availability improvement: increasing shelf availability, expanding assortment completeness, and improving shelf visibility at the 52.5% of consumers' preferred kirana store outlets — the channel where product availability performance is most deficient and the potential for purchase frequency gains is greatest. Second, reactive stockout reduction: the 62.5% stockout incidence rate, the 41.3% brand-switching response rate, and the 26.6% dissatisfaction with post-stockout recovery collectively constitute a significant ongoing loyalty erosion risk that demands immediate and sustained management intervention.

The following evidence-based recommendations are offered to CavinKare's management:

- Implement a Zero-Tolerance Stockout Protocol for priority SKUs at high-volume kirana outlets, with mandatory minimum stock norms and 24-hour emergency replenishment SLAs.
- Expand direct sales force coverage in Chennai by adding route representatives with twice-weekly call frequency at high-volume kirana outlets to reduce stockout incidence.
- Deploy a mobile app-based assisted ordering system for kirana retailers to generate automated low-stock alerts and recommended reorder quantities.
- Introduce a Must-Stock SKU list of 5-7 priority items per brand for kirana outlets, with sales force incentives tied to achieving 100% Must-Stock compliance.
- Invest in branded shelf fixtures at top kirana and all modern trade outlets to ensure consistent facing counts (average of 4 facings per SKU) and distinctive visual presence.



- Pursue 100% listing completeness on Blinkit, Swiggy Instamart, Zepto, BigBasket, and Amazon within 12 months with platform-level inventory guarantees.
- Design age-specific purchase frequency-building programmes targeting the 18-30 cohort through mobile loyalty apps and sachet promotion at college and young professional retail access points.
- Implement a Post-Stockout Service Recovery Protocol with 24-hour shelf restoration SLA and targeted consumer outreach messaging to reduce permanent brand switching probability.

In conclusion, product availability is the most fundamental expression of a brand's commitment to its consumers. CavinKare's brand promise of care and innovation must be matched by the operational commitment to ensuring that its products are reliably available, visibly displayed, and comprehensively stocked across every retail touchpoint where Chennai consumers shop. The evidence confirms that making good on this commitment will generate measurable, substantial, and sustained improvements in purchase frequency and brand loyalty, with an estimated aggregate purchase frequency improvement of 15-22% from full implementation of the recommended distribution strategy improvements.

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