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Survey on Comparative Study of Online VS. Offline Buying Behavior of Consumer for Grocery Product in Surat

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A B S T R A C T

This research delves into the multifaceted dynamics of consumer behavior in the grocery shopping landscape of Surat, Gujarat, where traditional brick-and-mortar stores coexist with the burgeoning realm of online platforms. The study investigates the preferences of different age groups, exploring factors such as proximity to home, product quality, personal interactions with store staff, the ability to inspect products, and the allure of special discounts. Focusing on two prominent players, JioMart and DMart, the research aims to provide a comprehensive understanding of the factors shaping consumer choices in this dynamic market .The literature review explores previous studies on online shopping intentions, the impact of demographic variables on online shopping in India, and the influence of factors like monthly income, gender, and peer influence on consumer behavior for apparel. Highlighting the younger population's central role in online shopping, the review emphasizes the need for a nuanced understanding of consumer behavior, considering various demographic factors. The research objectives center around conducting a comparative study of online vs. offline buying behavior for grocery products in Surat. The research design involves a descriptive approach with non-probability convenient sampling, encompassing 156 respondents in the Surat area. Primary data is collected through a Google Form questionnaire, and the analysis is performed using MS Excel and SPSS.The research identifies a notable gap in existing studies, emphasizing the need to explore factors beyond convenience and digital marketing impact, such as cultural influences, trust dynamics, and specific preferences of urban versus suburban consumers in the grocery retail context

INTRODUCTION

In the ever-changing landscape of retail, the advent of digital technologies has revolutionized the way consumers engage in everyday shopping, particularly for groceries. This study investigates the intricate dynamics of consumer behavior in Surat, a dynamic city in Gujarat, where traditional brick-and-mortar stores coexist with the burgeoning realm of online platforms. As Surat encapsulates a rich blend of cultural heritage and economic dynamism, it serves as a compelling setting for this comparative analysis. Navigating a plethora of options, consumers' choices between online and offline grocery shopping are influenced by multifaceted factors. This research delves into the preferences of different age groups, exploring opinions on proximity to home, product quality, personal interactions with store staff, the ability to inspect products, and the allure of special discounts. Through a meticulous examination of survey data from Surat residents, the study contributes valuable insights to the broader discourse on consumer behavior in the grocery shopping context. By dissecting the nuances of both online and offline buying behavior, the research aims to provide a comprehensive understanding of the factors shaping consumer choices in this dynamic market, offering relevance not only to local businesses and policymakers in Surat but also contributing to the broader academic and business community seeking to navigate the evolving retail landscape in the digital age.

Jio Mart

At JioMart, our goal is to make shopping easier, faster, and more convenient than ever before for our customers. We are committed in our mission to build a trustworthy online marketplace which offers the widest range of products across the country. With our proven user experience and reliable services, we are committed to provide customers in India with a trusted and hassle-free one-stop-shop for all their shopping needs across various categories such as Electronics, Grocery, Fashion, Home & For over 17 years of operations with Reliance Retail, we have built most reliable retail presence that caters to the unique needs of customers in India, and we are committed to bring a similar experience online with JioMart. Our vast exceptional selection of products make our online portal the preferred shopping destination for all kinds of customers.With our convenient payment options, on time delivery services, dependable customer service, and secure online transactions, you can now shop smarter, faster and more seamlessly within a few clicks. Our commitment to excellence has been recognized worldwide, and we look forward to offering our customers a delightful shopping experience online with JioMart. #Happy Shopping with JioMart.

Dmart

DMart is a one-stop supermarket chain that aims to offer customers a wide range of basic home and personal products under one roof. Each DMart store stocks home utility products - including food, toiletries, beauty products, garments, kitchenware, bed and bath linen, home appliances and more - available at competitive prices that our customers appreciate. Our core objective is to offer customers good products at great value.

DMart was started by Mr. Radhakishan Damani and his family to address the growing needs of the Indian family. From the launch of its first store in Powai

in 2002, DMart today has a well-established presence in 338 locations across Maharashtra, Gujarat, Andhra Pradesh, Madhya Pradesh, Karnataka, Telangana, Chhattisgarh, NCR, Tamil Nadu, Punjab and Rajasthan. With our mission to be the lowest priced retailer in the regions we operate, our business continues to grow with new locations planned in more cities.The supermarket chain of DMart stores is owned and operated by Avenue Supermarts Ltd. (ASL). The company has its headquarters in Mumbai. The brands D Mart, D Mart Minimax, D Mart Premia, D Homes, Dutch Harbour, etc are brands owned by ASL.

LITERATURE REVIEW

The thesis of , found that the level of online shopping intention was relatively high and direction of attitude towards online shopping was positive among the postgraduate students. Moreover, it was found that different orientation, perceived benefits and demographic characteristics (gender, age, and income) were significantly and positively correlated with the attitude towards online shopping. In addition, the result revealed that the perceived behavioural control and attitude were significantly and positively correlated withonline shopping intention.(Delafrooz, 2009)

Studied the growth of online market's in India and identified the impact of demographic variables on consumers' online shopping in India. The variables are: satisfaction with online shopping, future purchase intention and frequency of online shopping, number of items purchased online and overall spend on online shopping. All the demographic factors significantly affect consumers' online shopping, but the frequency of purchase variable is significantly less important in Indians online shopping.(Nagra and Gopal)

The purpose is also to study how consumer behavior for apparel is influenced by factors like monthly income, gender and peer influence. The survey conducted on Delhi shows that the consumers prefer shopping mostly with their friends and family members. They are influenced by their choices of their friends, family members, celebrities, magazines etc. Quality, comfort, brand are the main criteria's which impact their buying behavior towards fashion apparels. The study shows that the age, gender, education and occupation do not have any impact on buying behavior of consumers. Finally, the survey shows that Delhi consumers have positive attitude towards fashion apparel brands (Deepali Saluja. (2016))

The younger population is at the center of online shopping and hence, remains the focal point of studying consumer behaviour. One key aspect is how long they have been internet users, as more technically sound people would be more ardent e-shoppers .(VA Sumathi et al., 2016).

IAMAI, 2019 reported that more than 50% of internet users belong to 20-40 years. This group belongs to the working class, which an essential factor for an e-grocery shopper. Even though the younger population is more likely to go for online shopping, in the current scenario, people from all age groups are indulging in it because of changing customer mindsets.(Mitra, 2018)

METHODOLOGY

Table 1. Research Design Method

Research Design Method	Descriptive Research
of Sampling Number of	Non-Probability Convenient 156
Respondents Area of	Surat
Survey	Primary
Type of Research	Questionnaire- Google Form Charts &
Data Collection Method Data	Tables
Analysis	Msexcel, Spss
Tools	Close Ended
Types of Questions	

Despite the growing popularity of online grocery shopping in Surat, there is a notable dearth of studies that comprehensively investigate the nuanced factors influencing the consumer decision- making process between online and offline channels. Current research tends to focus predominantly on convenience and digital marketing impact, leaving unexplored areas such as the role of cultural influences, trust dynamics, and the specific preferences of urban versus suburban consumers in the context of grocery product choices. Closing this research gap is imperative for a more holistic understanding of the factors shaping consumer behavior in the evolving landscape of grocery retail in Surat.

RESULTS

Demographic Summary:

Gender:

- The data set includes 156 respondents.
- 47.4% of respondents are male, followed closely by females (52.6%).

Age:

- Most respondents belong to the age group 20-25 (42.9%), 26-30 (25.3%),
- 31-35 (22.7%), 36-40 (7.1%)
- While 1.9% of respondents belong to the age group of 41 and above

Educational Background:

- The majority of the respondents hold a High school (7.1%), Bachelor's Degree (39.6%) followed by a Master's degree(35.7%).
- Around 17.5% of respondents are businessman and there are small percentages of respondents are housewife, CA, diamond worker.

Cronbach Alpha

Table 2. Reliability Statistics

Cronbach's Alpha	N of Items
812	17

Source: SPSS Software

As the alpha value is more than 0.07 i.e. 0.812 the data is reliable.

Hypothesis Testing:

(H1): There is a significant association between age and the choice of shopping for groceries offline based on proximity to home.

(H2): There is a significant association between age and the choice of shopping for groceries offline based on quality and freshness of products.

(H3): There is a significant association between age and the choice of shopping for groceries offline based on personal interaction with store staff.

(H4): There is a significant association between age and the choice of shopping for groceries offline based on the ability to inspect products before purchase.

(H5): There is a significant association between age and the factors influencing the choice of shopping for groceries online based on convenience and time-saving.

(H6): There is a significant association between age and the factors influencing the choice of shopping for groceries online based on a wider product variety.

(H7): There is a significant association between age and the factors influencing the choice of shopping for groceries online based on special discounts and offers.

(H8): There is a significant association between age and the factors influencing the choice of shopping for groceries online based on contactless shopping.

(H9): There is a significant association between age and the opinion on the cost-effectiveness of offline grocery shopping.

(H10): There is a significant association between age and the opinion on the cost-effectiveness of online grocery shopping.

Chi-Square Analysis

(H1): There is a significant association between age and the choice of shopping for groceries offline based on proximity to home.

Table 3. Age * What Factor Influence Your Choice of Shopping for Groceries Offline ? [Proximity to Home]

Crosstab							
Count							
		What factor influences your choice of shopping for groceries offline? [Proximity to home]					Total
		1	2	3	4	5	
Age	20-25	10	7	12	19	18	66
	26-30	4	1	7	7	20	39
	31-35	3	2	4	8	18	35
	36-40	0	3	0	4	4	11
	41 and above	0	0	0	1	2	3
Total		17	13	23	39	62	154

Source: Spss Software

Table 3. Chi- Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.425[a]	16	.202
Likelihood Ratio	23.200	16	.108
Linear-by-Linear Association	5.329	1	.021
N of Valid Cases	154		

Source: Spss Software

a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .25.

Interpretation: As the p value is greater than 0.05, hence we reject H1. This shows that there is no relationship between age of respondents and the effect of

Age on what factor influence consumer choice of shopping for groceries offline Proximity to home.

(H2): There is a significant association between age and the choice of shopping for groceries offline based on quality and freshness of products.

Table 4. Age * What factor Influence Your Choice of Shopping for Groceries Offline? [Quality and Freshness of Product]

Crosstab							
Count							
		What factor influence your choice of shopping for groceries offline ? [Quality and freshness of product]					Total
		1	2	3	4	5	
Age	20-25	3	10	16	18	19	66
	26-30	0	5	3	11	20	39
	31-35	1	4	2	9	19	35
	36-40	0	2	1	5	3	11
	41 and above	0	0	1	2	0	3
Total		4	21	23	45	61	154

Source: Spss Software

Table 5. Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	20.788[a]	16	.187
Likelihood Ratio	23.160	16	.110
Linear-by-Linear Association	2.748	1	.097
N of Valid Cases	154		

**Source from Spss Software*

a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .08.

Interpretation: As the p value is greater than 0.05, hence we reject H2. This shows that there is no relationship between age of respondents and the effect of Age on what factor influence your choice of shopping for groceries offline Quality and freshness of product.

(H3): There is a significant association between age and the choice of shopping for groceries based on personal interaction with store staff.

Table 6. Age * What Factor Influence Your Choice of Shopping for Groceries Offline? [Personal Interaction with Store Staff]

Crosstab							
Count							
		What factor influence your choice of shopping for groceries offline ? [Personal interaction with store staff]					Total
		1	2	3	4	5	
Age	20-25	4	9	13	23	17	66
	26-30	4	5	8	10	12	39
	31-35	2	2	9	8	14	35
	36-40	2	2	2	4	1	11
	41 and above	0	0	1	2	0	3
Total		12	18	33	47	44	154

Source: Spss Software

Table 7. Chi Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.200[a]	16	.730
Likelihood Ratio	13.463	16	.639
Linear-by-Linear Association	.061	1	.805
N of Valid Cases	154		

Source: Spss Software

a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .23.

Interpretation: As the p value is greater than 0.05, hence we reject H3. This shows that there is no relationship between age of respondents and the effect of age what factors influence your choice of shopping for groceries offline Personal interaction with store staff.

(H4): There is a significant association between age and the choice of shopping for groceries based on the ability to inspect products before purchase.

Table 8. Age * What Factor Influence Your Choice of Shopping for Groceries Offline ? [Ability to Inspect Products Before Purchase]

Crosstab							
Count							
		What factor influence your choice of shopping for groceries offline ? [Ability to inspect products before purchase]					Total
		1	2	3	4	5	
Age	20-25	2	8	12	18	26	66
	26-30	1	3	3	10	22	39
	31-35	0	6	3	5	21	35
	36-40	0	3	0	3	5	11
	41 and above	0	0	0	2	1	3
Total		3	20	18	38	75	154

Source: Spss Software

Table 9. Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	16.369[a]	16	.428
Likelihood Ratio	18.319	16	.306
Linear-by-Linear Association	1.003	1	.317
N of Valid Cases	154		

Source: Spss Software

a. 15 cells (60.0%) have expected count less than 5. The minimum Expected count is .06.

Interpretation : As the p value is larger than 0.05, hence we reject H4.This shows that there no is a relation between age of respondent and What factor influence consumer's choice of shopping for groceries offline Ability to inspect products before purchase.

(H5): There is a significant association between age and the choice of shopping for groceries online based on convenience and time saving.

Table 10. Age * What Factors Influence Your Choice of Shopping for Groceries Online ? [Wider Product Variety]

Crosstab							
Count							
		What factors influence your choice of shopping for groceries online ? [wider product variety]					Total
		1	2	3	4	5	
Age	20-25	4	15	12	14	21	66
	26-30	1	4	8	12	14	39
	31-35	1	5	5	13	11	35
	36-40	1	1	4	0	5	11
	41 and above	0	0	0	2	1	3
Total		7	25	29	41	52	154

Source: Spss Software

Table 11. Chi Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.627[a]	16	.479
Likelihood Ratio	18.652	16	.287
Linear-by-Linear Association	1.713	1	.191
N of Valid Cases	154		

Source: Spss Software

a. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .14.

Interpretation: As the p value is larger than 0.05, hence we reject H6.This shows that there is no a relation between age of respondent and what factors influence consumer's choice of shopping for groceries online [Wider product variety].

(H7): There is a significant association between age and the choice of shopping for groceries online based on special discounts and offers.

Table 12. Age * What Factors Influence Your Choice of Shopping for Groceries Online ? [Special Discount and Offers]

Crosstab							
Count							
		What factors influence your choice of shopping for groceries online ? [special discount and offers]					Total
		1	2	3	4	5	
Age	20-25	9	6	16	11	24	66
	26-30	1	3	7	11	17	39
	31-35	0	7	11	4	13	35
	36-40	0	2	3	0	6	11
	41 and above	0	0	0	2	1	3
Total		10	18	37	28	61	154

Source: Spss Software

Table 13. Chi Square Test

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	25.223[a]	16	.066
Likelihood Ratio	28.331	16	.029
Linear-by-Linear Association	1.432	1	.232
N of Valid Cases	154		

Source: Spss Software

a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .19.

Interpretation: As the p value is larger than 0.05, hence we reject H7.This shows that there is no a relation between age of respondent and what factors influence consumer's choice of shopping for groceries online [special discount and offers].

(H8): There is a significant association between age and the choice of shopping for groceries online based on contact less shopping.

Table 14. Age * What Factors Influence Your Choice of Shopping for Groceries Online? [Contactless Shopping]

Crosstab							
Count							
		What factors influence your choice of shopping for groceries online ? [Contactless shopping]					Total
		1	2	3	4	5	
Age	20-25	6	12	15	13	20	66
	26-30	4	6	6	6	17	39
	31-35	1	11	7	4	12	35
	36-40	1	2	5	0	3	11
	41 and above	0	0	0	3	0	3
Total		12	31	33	26	52	154

Source: Spss Software

Table 15. Chi Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.173[a]	16	.040
Likelihood Ratio	24.301	16	.083
Linear-by-Linear Association	.003	1	.955
N of Valid Cases	154		

Source: Spss Software

a.12 cells (48.0%) have expected count less than 5. The minimum expected count is .23.

Interpretation: As the p value is smaller than 0.05, hence we reject H8.This shows that there is a relation between age of respondent and What factors influence consumer's choice of shopping for groceries online? [Contactless shopping]

(H9): There is a significant association between age and the opinion on the cost- effectiveness of offline grocery shopping.

Table 16. Age * In Your Opinion, Which Method of Grocery Shopping is More Cost-Effective? [Offline]

Crosstab							
Count							
		In your opinion, which method of grocery shopping is more cost-effective? [Offline]					Total
		0	always	sometimes	rerely	Never	
Age	20-25	1	22	24	12	7	66
	26-30	0	13	11	12	3	39
	31-35	0	5	12	14	4	35
	36-40	0	2	5	4	0	11
	41 and above	0	0	1	1	1	3
Total		1	42	53	43	15	154

Source: Spss Software

Table 17. Chi Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.568[a]	16	.557
Likelihood Ratio	16.628	16	.410
Linear-by-Linear Association	4.859	1	.028
N of Valid Cases	154		

Source: Spss Software

a. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .02.

Interpretation: As the p value is larger than 0.05, hence we reject H9.This shows that there is no a relation between age of respondent and offline method of grocery shopping is more cost-effective.

(H10): There is a significant association between age and the opinion on the cost- effectiveness of online grocery shopping.

Table 18. Age * In Your Opinion, Which Method of Grocery Shopping is More Cost-Effective? [Online]

Crosstab							
Count							
		In your opinion, which method of grocery shopping is more cost-effective? [Online]					Total
		0	always	sometimes	rerely	Never	
Age	20-25	1	18	35	8	4	66
	26-30	0	9	22	8	0	39
	31-35	0	9	18	4	4	35
	36-40	0	5	5	1	0	11
	41 and above	0	0	3	0	0	3
Total		1	41	83	21	8	154

Source: Spss Software

Table 19. Chi Square Test

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	12.857[a]	16	.683
Likelihood Ratio	15.869	16	.462
Linear-by-Linear Association	.009	1	.924
N of Valid Cases	154		

Source: Spss Software

a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .02.

Interpretation: As the p value is larger than 0.05, hence we reject H10.This shows that there is no a relation between age of respondent Online method of grocery shopping is more cost-effective .

DISCUSSION

The demographic profile of the respondents in the study reveals a balanced distribution between genders, with 47.4% male and 52.6% female participants. The age distribution indicates that the majority fall within the 20-25 age group (42.9%), followed by 26-30 (25.3%), 31-35 (22.7%), 36-40 (7.1%), and 41 and above (1.9%). In terms of educational background, the majority have a Bachelor's degree (39.6%), followed by a Master's degree (35.7%), and a smaller percentage with a High school education (7.1%).

The reliability test, measured by Cronbach's Alpha, yields a satisfactory result of 0.812, indicating the reliability of the survey data.

The chi-square analysis investigates various hypotheses related to the factors influencing consumers' choices between online and offline grocery shopping based on age. The results indicate that there is no significant association between age and the choice of shopping for groceries offline based on proximity to home, quality and freshness of products, and personal interaction with store staff. Similarly, there is no significant association between age and the factors influencing the choice of shopping for groceries online based on convenience and time-saving, a wider product variety, special discounts and offers, and contactless shopping.

However, there is a significant association between age and the choice of shopping for groceries online based on contactless shopping, indicating that different age groups may have varying preferences for this feature.

Regarding opinions on cost-effectiveness, there is no significant association between age and the opinion that offline grocery shopping is more cost-effective. Similarly, there is no significant association between age and the opinion that online grocery shopping is more cost-effective.

In conclusion, the study provides valuable insights into the complex dynamics of consumer behavior in the context of grocery shopping in Surat. While certain factors may not exhibit a significant association with age, the variation in preferences for contactless shopping among different age groups highlights the need for retailers to cater to diverse consumer needs. The research contributes to bridging the existing gap in understanding the nuanced factors influencing the choice between online and offline grocery shopping in the dynamic market of Surat.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this study sheds light on the intricate dynamics of consumer behavior in the Surat grocery shopping landscape. While age does not emerge as a significant factor in influencing choices related to proximity, quality, personal interaction, convenience, product variety, discounts, and cost-effectiveness, it does reveal a noteworthy association between age and the preference for contactless shopping in the online grocery domain. These findings underscore the importance of retailers catering to diverse age groups and preferences in the dynamic market of Surat, offering insights for both local businesses and policymakers navigating the evolving retail landscape.

FURTHER STUDY

This research still has related limitations so it is necessary to carry out further research on the topic of Comparative Study Survey Survey of Consumer Purchasing Behavior for Online vs Offline Grocery Products in order to perfect this research and increase insight for readers.

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