#### Original Researcher Article

## Threads of Influence: Insights from EFA and PCA on Consumer Purchase Behavior for Assam Silk

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#### ABSTRACT

This study investigates consumer purchase behavior in Assam's silk industry using Principal Component Analysis (PCA) and Exploratory Factor Analysis (EFA). From 19 variables, four principal components—Product Attributes, Marketing Effectiveness, Shopping Experience, and Product Experience—were identified, explaining majority of the variance. Evidence points to consumers' emphasis on product uniqueness, quality, and marketing influences, along with their preferences for better shopping experiences. Additionally, demographic factors like gender, age, occupation, and cultural community significantly impact the respondents' purchasing decisions. The analysis advocates the need for targeted marketing strategies that aim at the identified consumer segments, particularly middle-aged, self-employed individuals in smaller families. The insights provide strategic prescriptions for enhancing product offerings and marketing initiatives, aiming to draw from consumer expectations and cultural affinities. The study's implications serve as a guide for leveraging Assam's unique silk textile heritage while promoting growth in consumer satisfaction and industry competitiveness.

**Keywords**: Principal Component Analysis (PCA), Assam Silk Industry, Consumer Purchase Behaviour, Exploratory Factor Analysis (EFA).

#### 1. INTRODUCTION:

Consumer perspectives of any business is important for success in a competitive market. Consumer perspectives provide insight on how consumer thinks, feels and acts for products and services. The perception of consumers further affects the purchase decision that they make for products and services (Terziev, 2017; Imran, 2018; Agnihotri, 2022). Thus, an intricate understanding of consumer purchase behaviour will help in further decoding the consumer perceptions about the product, brand image and factors affecting their buying decisions. The fashion and textile industry are an intriguing industry due to its changing trends, seasonal variations and consumer preferences. As the fashion industry consistently thrives upon target marketing and personalization of shopping experiences, studies on consumer purchase behaviour have proven to be immensely helpful for target marketing strategy, product development and merchandizing (Jia, 2012). Such studies also assist in developing pricing strategies and innovative product designs. However, the most important contribution of understanding consumer purchase behaviour goes to devising effective marketing strategies that encompass most of the benefits of such studies (Cai, 2023; Yin et. al., 2023). Assam's silk industry is popular for its exotic varieties of Pat, Eri and Muga silk. In spite of a rich cultural heritage of the industry, there is yet a wide scope for realizing its worth in domestic and international markets (Hussain et. al., 2023). Even the coveted geographical indication (GI) status of Muga silk awarded in 2007 has not been

completely leveraged to gain market presence and marketability of this fine product (Hussain et.al. 2021). Quite visibly, the present silk industry in Assam has not been able to keep up with the dynamic preferences and tastes of modern consumers. Among various reasons, the lack of effective marketing strategies has been highlighted (Devi, 2002-03; Hussain et.al., 2023). The industry has been consistently missing out on emerging opportunities in sustainable consumption and the marketing of ethical product development that has tremendously influenced contemporary fashion (Bharali and Akoijam, 2022). Lack of insights on consumer purchase decisions are evident as the industry seems to lag behind in target marketing and product positioning. A consumer purchase behaviour study is necessary to gain insights into the drivers of consumer purchase decisions for silk in Assam. Results from such a study can be used to devise effective marketing strategies, branding, and innovative product development to meet consumer expectations for Assam silk. Literature is deficient of insights on the foundation concepts of marketing mix for this industry which is necessary for understanding the present marketing scene and offer suggestions for improvement strategies (Hussain, et. al., in press).

The study proceeds by drawing on the established concept of consumer purchase behaviour and the various groups of factors affecting it as described in section 2. In order to assure reliability in collected data the prescribed tests for internal consistency were conducted.

Further, the data was assessed for its readiness to put through Exploratory factor analysis (EFA) techniques, presented in section 2.1. Results from Principal Component Analysis (PCA) were presented in section 3. To provide more insight to the consumer purchase behaviour multiple tests of hypotheses were done and presented along with the results derived from PCA. The conclusion of the study is placed in section 4 and the study ends with implications provided in section 5.

#### 1.1. Research objectives

Research objective 1: To identify prominent factors affecting the consumer purchase behaviour of customers in the Assam silk industry

Research objective 2: To study the relationship between consumer purchase behavior and demographic variables of the customers in the Assam silk industry

#### 2. MATERIALS AND METHODS

The established concept of consumer purchase behaviour describes the influence of various factors such as social, personal, psychological, situational, buying patterns or buying decision process related factors and technological factors (Hawkins et. al., 2007; Loudon & Bitta, 2010). Certain product related and store related factors were also identified as described by Solomon (2020) and further validated from pilot surveys, which can be sorted into the major factor groups defining consumer purchase behaviour. The product related factors, also described in Kotler and Keller (2016) viz. quality, price, uniqueness, warranty, durability and comfort were identified as psychological factors; Appearance, packaging, design and colour were identified as factors related to purchase decision process. Store related variables as described by Berman and Evans (2018) viz., type of store, store display, sales assistance, sales promotion and discount were identified as situational factors while advertisement and brand image were identified as technological factors. Upon describing the consumer purchase behaviour, the study identifies the most prominent factors/variables that tend to affect the consumer purchase behaviour. This was achieved by conducting on the list of factors identified which influences consumer purchase behaviour. Data was also collected on six demographic variables namely. age, gender, occupation, family size, income and community. Analysis between the demographic variables age, occupation, income, family size, community and purchase behaviour were carried by chisquare analysis.

The respondents were selected by purposive sampling. Probability sampling was not appropriate for this study as generalizing the findings is not the aim of this study. Rather, the study aims to bring out insights from the consumer population regarding purchase behaviour which also fits the exploratory nature of this study. All respondents were verified consumers of Assam silk, thus fulfilling the criteria of being similar in a single characteristic, considered for purposive sampling. Sample size-400 (respondents residing in Assam) & 400 (respondents residing outside Assam). A size of 384 samples is commonly considered adequate while considering 95% significance level for a homogenous population. Hence, 400 samples were considered inside the state. To incorporate unique insights of customers of Assam silk that reside outside the state, 400 samples were additionally considered from outside the state. The total size of 800 samples can be considered a large sample, aiming to increase reliability and validity for the study. Data collection was done using a structured questionnaire.

#### 2.1. Analysis of data

The factors listed in this study affect consumer purchase behaviour of customers that exist in the Assam silk industry. Impact of individual factors on purchase behvaiour can be observed from the preference ratings given by the customers on individual factors. However, there may exist association between certain factors that affect the consumer purchase behaviour in a typical manner. The associated factors will improve the understanding of the impact of factors on consumer purchase behaviour in terms of a smaller number of components. Factor analysis is one such technique used to reduce multiple factors into smaller components to understand interdependence and cohesive behaviour among similarly grouped classes of factors. Out of the various techniques available for factor analysis, Principal Component Analysis (PCA) is suitable for this objective, as the primary aim is directed towards extracting prominent factors to understand the consumer purchase behaviour in the industry.

The list of factors/variables identified to carry out Principal Component Analysis include, Quality, Price, Uniqueness, Warranty, Durability, Reference Group, Occasional need, Design, Appearance, Packaging, Colour, Comfort, Type of Store, Store Display, Sales Assistance, Sales Promotion, Advertisement, Discount offered and Brand Image.

#### 2.1.1. Testing Internal consistency of scale used

As a standard step, Cronbach's Alpha coefficient was tested for the internal consistency of the scale used in the study. The results of the assessment has been provided in the Table 1.1.

Cronbach's Alpha	N of Items
.857	19

Table: 1.1.: Test of scale reliability

Since the value of Cronbach's alpha has come out to be more than 0.7, the internal consistency of the scale is considered reliable for measuring the items considered. A value greater than 0.8 is usually considered as a good measure suggesting the scale is able to produce accurate and trustworthy results.

#### 2.1.2. Test for appropriateness of data

The appropriateness of the data for conducting factor analysis is checked by conducting Kaiser-Meyer-Olkin (KMO) and Barlett's test. The results have been provided in the Table 1.2. below

Table 1.2. KMO and Barlett's test of sphericity

Kaiser-Meyer-Olkin Measure	.882	
Bartlett's Test of Sphericity	15838.511	
	df	171
	Sig.	.000

A value of KMO and barlett's test above 0.7 is considered satisfactory for proceeding with factor analysis. The present result of 0.882 is sufficient for our objective.

Another parameter used to check the appropriateness of data are the communalities of the factors or variables. The communalities of the factors or variables considered for factor analysis are expected to exceed the value of 0.5 to be suitable for further analysis. The communalities of the factors in this study are provided in Table 1.3. below

**Table 1.3.: Communalities of factors** 

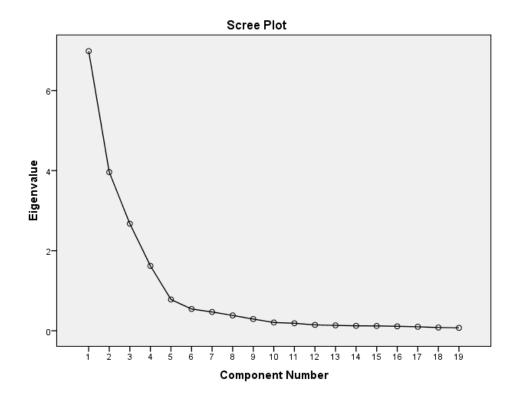
Table 1.5 Communanties of factors	Extraction
DOES QUALITY INFLUENCE YOUR PURCHASE	
BEHAVIOUR	.913
DOES PRICE INFLUENCE YOUR PURCHASE	.582
BEHAVIOUR	
DOES UNIQUENESS INFLUENCE YOUR	.851
PURCHASE BEHAVIOUR	
DOES WARRANTY INFLUENCE YOUR	.910
PURCHASE BEHAVIOUR	
DOES DURABILITY INFLUENCE YOUR	.860
PURCHASE BEAHVIOUR	
DOES DESIGN INFLUENCE YOUR PURCHASE	.860
BEHAVIOUR	
DOES COMFORT INFLUENCE YOUR PURCHASE	.909
BEHAVIOUR	
DOES ADVERTISEMENT INFLUENCE YOUR	.880
PURCHASE BEHAVIOUR	
DOES STORE DISPLAY INFLUENCE YOUR	919
I CKCHASE BEHAVIOUR	
DOES BRAND IMAGE INFLUENCE YOUR	.512
PURCHASE BEHAVIOUR	
DOES SALES ASSISTANCE INFLUENCE YOUR	.940
PURCHASE BEHAVIOUR	
DOES REFERENCE GROUP INFLUENCE YOUR	.622
PURCHASE BEHAVIOUR	
DOES OCCASIONAL NEED INFLUENCE YOUR	.768
PURCHASE BEHAVIOUR	
DOES APPEARANCE INFLUENCE YOUR	.864
PURCHASE BEHAVIOUR	
DOES PACKAGING INFLUENCE YOUR	.862
PURCHASE BEHAVIOUR	
DOES COLOUR INFLUENCE YOUR PURCHASE	.873
BEHAVIOUR	
DOES TYPE OF STORE INFLUENCE YOUR	.929
PURCHASE BEHAVIOUR	
DOES SALES PROMOTION INFLUENCE YOUR	.559
PURCHASE BEHAVIOUR	
DOES DISCOUNT OFFERED INFLUENCE YOUR	.629
PURCHASE BEHAVIOUR	

#### 2.1.3. Principal Component Analysis (PCA)

PCA was conducted by considering the extraction method as Principal components by retaining factors with Eigen values greater than 1. Varimax rotation was used to obtain the rotated component matrix. The results are expressed in the form of total variance explained in terms of extracted principal components and the rotated component matrix. The components extracted are also visually presented in a scree plot for understanding the contribution of principle components to cumulative variance.

Table 1.4.: Total variance explained by extracted components

	Initial 1	Eigenvalue	S	Extraction Loading		of Squared	Rotation Loading		of Squared
Compone			ofCumulativ			ofCumulativ			ofCumulativ
nt	Total	Variance	e %	Total	Variance		Total	Variance	e %
1	6.984	36.760	36.760	6.984	36.760	36.760	6.062	31.905	31.905
2	3.962	20.853	57.613	3.962	20.853	57.613	4.568	24.044	55.949
3	2.675	14.077	71.689	2.675	14.077	71.689	2.794	14.707	70.656
4	1.621	8.531	80.221	1.621	8.531	80.221	1.817	9.564	80.221
5	.781	4.109	84.329						
6	.544	2.865	87.195						
7	.470	2.472	89.667						
8	.383	2.017	91.683						
9	.293	1.542	93.225						
10	.206	1.086	94.312						
11	.188	.991	95.302						
12	.147	.773	96.075						
13	.135	.711	96.787						
14	.124	.652	97.438						
15	.121	.634	98.072						
16	.112	.588	98.660						
17	.100	.527	99.188						
18	.081	.427	99.615						
19	.073	.385	100.000						



Component 1 explains 31.905 % of the total variance. Component 2 explains 24.044 %, Component 3 explains 14.707 % and component 4 explains 9.564 % of the total variance respectively.

#### Chart 1.1. Scree plot

The scree plot above represents the eigen values of all the components considered in the study. As per the requirements for PCA, only the eigen values greater than 1 are retained. These eigen values naturally belong to the extracted principal components. From the plot it can be easily observed that four (4) components were retained with component 4 with an eigen value 1.817. The left portion of the scree plot shows a steep rise from component 4 indicating the components with eigen values greater than 1. From component 5 and onwards to component 19 the plot is fairly flat. These are the component that are not retained after PCA.

Table 1.5.: Rotated component matri	X					
1	Component					
	1	2	3	4		
DOES QUALITY INFLUENCE	110	125	020			
IYOUR PURCHASE BEHAVIOUR		.135	.029	.938		
DOES PRICE INFLUENCE YOUR	0.40	750	025	054		
PURCHASE BEHAVIOUR	.048	.759	025	.054		
DOES UNIQUENESS	i					
INFLUENCE YOUR PURCHASE	.906	.153	059	.067		
BEHAVIOUR						
DOES WARRANTY INFLUENCE	.944	110	0.62	050		
YOUR PURCHASE BEHAVIOUR	.944	.110	062	.058		
DOES DURABILITY INFLUENCE	.919	106	020	052		
YOUR PURCHASE BEAHVIOUR	.919	.106	028	.052		
DOES DESIGN INFLUENCE	.911	140	002	057		
YOUR PURCHASE BEHAVIOUR	.911	.140	082	.057		
DOES COMFORT INFLUENCE	006	1.00	020	022		
YOUR PURCHASE BEHAVIOUR	.096	.169	.030	.933		
DOES ADVERTISEMENT						
INFLUENCE YOUR PURCHASE	.095	.931	.023	.066		
BEHAVIOUR						
DOES STORE DISPLAY						
INFLUENCE YOUR PURCHASE		.031	.957	.003		
BEHAVIOUR						
DOES BRAND IMAGE						
INFLUENCE YOUR PURCHASE		.693	.016	.110		
BEHAVIOUR						
DOES SALES ASSISTANCE						
INFLUENCE YOUR PURCHASE		.020	.967	.032		
BEHAVIOUR						
DOES REFERENCE GROUP	,					
INFLUENCE YOUR PURCHASE	.138	.765	.014	.129		
BEHAVIOUR						
DOES OCCASIONAL NEED	,					
INFLUENCE YOUR PURCHASE	.131	.861	.048	.086		
BEHAVIOUR						
DOES APPEARANCE						
INFLUENCE YOUR PURCHASE		.105	022	.060		
BEHAVIOUR						
DOES PACKAGING INFLUENCE	000	006	020	0.42		
YOUR PURCHASE BEHAVIOUR	.923	.086	020	.043		
DOES COLOUR INFLUENCE		00.5	005	0.40		
YOUR PURCHASE BEHAVIOUR	.928	.096	006	.043		
DOES TYPE OF STORE						
INFLUENCE YOUR PURCHASE		.040	.959	.028		
BEHAVIOUR						
DOES SALES PROMOTION	i					
INFLUENCE YOUR PURCHASE		.743	.039	.013		
BEHAVIOUR						
DOES DISCOUNT OFFERED						
INFLUENCE YOUR PURCHASE		.789	.004	.004		
BEHAVIOUR						
Extraction Method used: Principal C	omponent An	alysis.		•		
Rotation Method applied: Varimax						

a. Rotation has converged in 4 iterations.

The table above shows the various extracted components loading onto the respective factors considered for the study. It is notable that a single factor loads significantly and exclusively only onto a single component. This is called unidimensionality.

#### 2.2.1. Association between gender and consumer purchase decision

The relation between gender and consumer purchase decision was tested using the following hypotheses.

- H0 G: There is no significant association between gender and consumer purchase
- decision for Assam silk products
- H1 G: There is a significant association between gender and consumer purchase decision for Assam silk products

The Chi-square test results for this hypothesis has been provided in the Table 1.6 below:

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	9.928a	1	.002	
Continuity Correctionb	9.157	1	.002	
Likelihood Ratio	10.981	1	.001	
Fisher's Exact Test				.002
Linear-by-Linear Association	9.915	1	.002	
N of Valid Cases	800			
a. 0 cells (0.0%) have expected	count less t	han 5. Th	ne minimum expected cou	nt is 26.63.
b. Computed only for a 2x2 tab			•	

The Pearson's Chi-square value is 9.928 with p-value of 0.002. Thus, the relation between gender and consumer purchase decision is significant.

#### 2.2.2. Association between occupation and consumer purchase decision

The existence of association between occupation and consumer purchase decision was tested using the following hypotheses.

- H0 O: No relation exists between Occupation and consumer purchase decision
- for Assam silk products
- H1 O: There is significant relation between Occupation and consumer Purchase
- decision for Assam silk products

The Chi-square test results for this hypothesis has been provided in the Table 1.7 below:

Table 1.7: Chi-square test of independence between occupation and consumer purchase decision

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	195.130a	5	.000
Likelihood Ratio	244.855	5	.000
Linear-by-Linear Association	13.800	1	.000
N of Valid Cases	800		
a. 0 cells (0.0%) have expected	ed count less	than 5. The 1	minimum expected
count is 5.59.			

The Chi-square value in this case is 195.130 with a p value of 0.000. So, there is significant relation between occupation and consumer purchase decision.

#### 2.2.3. Association between family size and consumer purchase decision

The hypotheses formulated for this study have been laid out below:

- H0 F: Family size and consumer purchase decision for Assam silk products are
- H1 F: Family size and consumer purchase decision for Assam silk products are related

The results of Chi-square test of independence has been given in Table 1.8 below,

Table 1.8: Chi-Square test of Independence between family size and consumer purchase decision

	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	113.971a	3	.000		
Likelihood Ratio	112.563	3	.000		
Linear-by-Linear Association	97.342	1	.000		
N of Valid Cases	800				
a. 0 cells (.0%) have expected count less than 5. The minimum expected					
count is 25.80.					

The Chi-square value for this test is 113.971 with a p value of 0.000, which is lesser than 0.05. Hence, the null hypothesis is also rejected in this case.

#### 2.2.4. Association between income and consumer purchase decision

The hypotheses formulated for consumer purchase decision and income is as follows,

- H0 I: There is no relation between Income and consumer purchase
- decision for Assam silk products
- H1 I: There is a significant relation between Income and consumer purchase decision for Assam silk products

Upon testing these hypotheses with Chi-Square test of independence, the following results were found.

Table 1.9. Chi-Square test of independence between consumer purchase decision and income

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	264.337a	5	.000
Likelihood Ratio	301.741	5	.000
Linear-by-Linear Association	115.263	1	.000
N of Valid Cases	800		
a. 0 cells (0.0%) have expected count is 14.79.	ed count les	s than 5.	The minimum expected

As the Chi-square value of 264.337 has a p value of 0.000, which is again less than 0.05, hence it is proven that income and consumer purchase decision are significantly related.

## 2.2.5. Association between community and consumer purchase decision

The hypotheses formulated for consumer purchase decision and community are as given below,

- H0 C: There is no significant relation between community and consumer
- purchase decision for Assam silk products
- H1 C: There is a significant relation between community and consumer purchase decision for Assam silk products

The chi-square test results for the hypotheses given above, are provided below,

Table 1.10. Chi-Square test of independence between community and consumer purchase decision

	Value		Asymp. Sig. (2-sided)
Pearson Chi-Square	15.963a	3	.001
Likelihood Ratio	16.545	3	.001
Linear-by-Linear Association	15.310	1	.000
N of Valid Cases	800		
a. 0 cells (0.0%) have expecte count is 9.21.	d count less	than 5. The r	ninimum expected

The results show a Chi-square value of 15.963 with a p value of 0.001. The p value is less than 0.05. Hence the hypothesis that community and consumer purchase decision are unrelated has been rejected.

#### 2.2.6. Association between age and consumer purchase decision

Hypotheses formulated to understand the relationship between age and consumer purchase decision has been given below,

- H0 A: There is no significant relation between age group and consumer
- purchase decision for Assam silk products

• H1 A: There is a significant relation between age group and consumer purchase decision for Assam silk products

The results from the chi-square test have been provided below,

Table 1.11. Chi-Square test of independence between age and consumer purchase decision

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	140.577a	3	.000
Likelihood Ratio	138.653	3	.000
Linear-by-Linear Association	118.778	1	.000
N of Valid Cases	800		
a. 0 cells (.0%) have expected	d count less	than 5.	The minimum expected

The Chi-square value of 140.577 has a p value of 0.000. This proves that there must be significant relation between age and consumer purchase decisions.

#### 3. RESULTS AND DISCUSSION

PCA has resulted in the identification of four (4) principal components from an original number of nineteen (19) variables or factors. These components together explain 80.221 % of the total variance among all the factors considered. The first component after rotation explains 31.905 % of the total variance. The first and the second component taken together explain 55.949 % variance. The first, second and third components explain 70.656 % variance of all the factors taken together.

The association of various factors with the extracted components is an important result in the study. By observing the similarity among the variables that have loaded into a single component, the nature of the component can be identified.

Component 1: The component correlates strongly with variables that measure Uniqueness, durability, appearance, packaging, colour, design and warranty. It reveals that customers place importance on the features of a silk product while making a purchase. Hence this component represents "Product Attributes".

Component 2: This component loads well on variables Reference group, Brand image, price, occasional need, advertisement, sales promotion and discount. All of the variables reflect on the success of marketing initiatives on purchase decision. This component represents "Marketing effectiveness".

Component 3: This component is strongly loaded onto variables Store display, type of store and sales assistance. This indicates that experience of customers, especially in physical settings are very important for consumer purchase behaviour in case of silk products. This component represents "Shopping experience".

Component 4: This component loads strongly onto factors Quality and Comfort. This suggests that during as well as post sales assessment of quality and comfort dimensions of the silk product reinforces the purchase decision and enhances chances for repeat purchases. This component represents "Product experience".

From the results, it is evident that consumers of Assam silk industry value product attributes significantly while making a purchase (Prathap & C.C., 2020; Saikia, 2011). While most focus in case of silk, is in aesthetic appeal and uniqueness, more attention may be given to other dimensions of product like durability and packaging to attract more consumers (Prathap & C.C., 2020; Saikia, 2011). Aware customers are more attracted to warranties besides the other product attributes. The derivation of marketing effectiveness as a principal component in consumer behaviour for silk products enlarges the scope of marketing in Assam silk industry (Khakhlari, 2020; Sarma et al., 2023). Factors such as brand image, advertisement, sales promotion, discounts and even price directly indicate the importance of marketing effectiveness (Cho & Hwang, 2016; Lailah & Hariasih, 2024; Mishra et al., 2024; Rehman & Al-Ghazali, 2022). At the same time, the association of factors like reference groups and occasional need also suggest the need for target marketing campaigns that are necessary to position brands to meet occasional need of the target customers. Shopping experience as a component draws focus towards the importance of intelligent store designs to adapt with changes and provide engaging sales assistance to customers (Bagdziunaite, Chatzoglou et al., 2022; Khan et al., 2022; Lourenço et al., 2025). The component of product experience is certainly another significant component for consumer purchase behaviour. The motivation towards continuous quality improvement and product comfort is not only necessary to drive sales growth but also to seek growth in customer loyalty and repeat purchases (Kiyokawa, 1993; Saikia, 2011; Sun et al., 2011). The present study has identified four important components, or simply factors to better understand consumer behaviour for silk products in Assam. Further, the understanding of the identified components can lead to effect ways in meeting the product needs of silk customers.

The Chi-square tests have revealed that relationships exist between consumer purchase decision for silk products and the demographic variables considered for this study namely, gender, occupation, family size, income, community and age (Larsen et al., 2014; Lei et al., 2019; Merlino et al., 2021; Suvadarshini & Mishra, 2021). These findings will further help in customizing

the marketing strategies for silk products considering the impact of these demographic variables. Females have responded to making more purchases than male respondents regarding silk products (Lei et al., 2019). According to this study, people of age group 35-44 make most purchases followed by age group 25-34 and then the age group of 45-54. People belonging to age group of above 55 have stated a low preference to making purchases of silk products (Lei et al., 2019; Merlino et al., 2021). Form occupation perspective, self-employed and service holders have emerged showing significant interest to purchasing silk products. Home makers and professionals seem to have similar proportioned interest in silk product purchases (Larsen et al., 2014; Merlino et al., 2021). Families with members under 4 and between 4-6, have shown greater preference in silk purchases (Merlino et al., 2021). This may be due to easier allocation of budget towards this expense in smaller families. Most purchases of silk products in this study have been done by people in the income range of 9-11.99 lakhs per annum (Lei et al., 2019; Suvadarshini & Mishra, 2021). There is considerable number of respondents in the range under 3 lakhs income group who had made silk purchases. This could be due to an underlying fact such as culture to own a specific traditional garment by them (Aggarwal et al., n.d.; Chaudhry & Verma, 2020; Kereth, 2020). General Assamese and Assamese tribal communities have emerged as the highest purchasers of silk products in this study followed by Bengali speaking Assamese community (Baruah, 2016; Goswami et al., 2016; Yasmin et al., 2025). This finding also reflects the cultural aspects of Assamese community that pushes the sale of silk products in Assam (Aggarwal et al., n.d.; Baruah, 2016; Kereth, 2020).

#### 4. CONCLUSION FROM THE STUDY

From the study, it can be deduced that female buyers, middle aged individuals, occupationally self-employed who are part of smaller families with mid to higher income levels are the key customer segments in silk industry of Assam. Cultural affinity of certain communities towards silk products additionally reflects the role of tradition in shaping consumer behaviour in Assam. The products offered and the marketing plans to promote sale of silk products can thus use these insights to customize and adapt their strategies to meet customer demand.

#### 5. IMPLICATIONS OF THE STUDY

The insights and perspectives from this study as originally aimed, may prove quite useful to producers and marketing bodies in this industry. By focusing on product attributes informed in this study, producers can attract more buyers to for this product. This study directly calls for investments in brand-building and target marketing campaigns for influencing consumer choices. As the product demands, sellers and marketers should offer more engaging retail layouts and assist customers with trained sales assistance to enhance the shopping experience. This is bound to accelerate sales in the long run. Realizing purchasing power and preferences of specific demographic segments will

increase the success rate of the marketing efforts previously suggested. The insights from the demographic variables demand the attention of the marketing strategists responsible for the development of this industry.

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