ARTICLE

A Study on Income as a Determinant of Buying Decision-making Styles

Adyasha Suvadarshini   Bidhu Bhusan Mishra[*]

Department of Business Administration, Utkal University, 751004, India

ARTICLE INFO	ABSTRACT
	The following paper attempts to understand if income determines the buying decision-making styles of consumers in Bhubaneswar, the capital city of Odisha, a state located on eastern India. A total of 103 respondents of Bhubaneswar were chosen by using the Mall intercept method. The samples were classified into three groups based on their average annual family income such as High Income, Middle Income and Low Income groups. Exploratory Factor Analysis was carried to identify the decision-making styles. ANOVA was employed to compare the shopping styles of these three income sub-groups. Results indicate that differences in consumer shopping styles exist among the income sub-groups. Findings of the study can be used by marketers for segmentation, targeting and positioning of retail shoppers which may facilitate them to compete efficiently. It is recommended that different income sub-groups should be viewed as distinct consumer segments and strategies should be formulated to cater each segment effectively.

1. Introduction

Income is one of the bases for demographic segmentation of the consumer market. Income forms the basis for social situations like class, status and the like. Social class, status, regional differences, rural, or urban residence, religious affiliation and ethnic background collate together to form different sub-cultures [1]. Studies also support that region, religion, age, gender, social class and occupation based subcultures have their co-existence [2]. Consumers are influenced by social status, lifestyle, personality, attitudes, demographics, culture, and the like which influence their purchase decision towards products and services [3]. Demographic factors such as gender, age, and income have a bearing impact on the adoption of particular consumer decision-making styles [4,5]. Income being one of the important demographic factors is related to commitment towards a particular product class, brand, or consumption activity and therefore has marketing implications related to segmentation, targeting, and positioning.

2. Previous Studies on the Influence of Income on Buying Decision-making

In Botswana, consumers belonging to high-level income groups and low-level income groups revealed high-quality consciousness, novelty-fashion consciousness and time energy-conserving [6]. But a research suggests that low income group consumers are highly price-

---

Corresponding Author:
Bidhu Bhusan Mishra,
Department of Business Administration, Utkal University, 751004, India;
Email: bidhu.mishra@gmail.com

https://doi.org/10.30564/jbar.v4i3.3193

17

conscious due to financial constraints [7] and less quality conscious even in matters of consumption of food [8]. But, high income earners have sound financial muscles and thus splurge in impulsive buying [9], seek leisure, spend greater time in shopping, plan their shopping spree significantly [10] and are more inclined to buy products online [11]. From the aforesaid studies, it can be interpreted that high income consumers elicit proclivity towards the traits of high-quality consciousness, novelty-fashion consciousness, recreational-hedonism, impulsiveness but tend to be less price conscious and confused due to over choice.

3. Decision-making of Consumers and Consumer Style Inventory (CSI)

The decision-making process is a totality of need identification, information collection, evaluation of alternatives and purchase-decision by consumer [12]. Consumer shopping behavior is well understood by his/her decision-making styles an analysis of which, enables marketers for crafting successful marketing strategies [13]. Decision-making styles are pretty enduring in nature and represent mostly static consumer personality, attitude, approach or mental orientation playing a vital role in buying goods, selecting stores or other purchase situations [14]. Sproles and Kendall, in 1986 developed a Consumer Style Inventory (CSI) entailing eight dimensions of decision-making. Closed-ended questionnaires with 40 items/questions were administered by Sproles and Kendall to assess the decision-making styles of high school students in the USA towards personal products namely clothing, cosmetics and hairdryers. The responses which were the by-products of cognitive-emotional aspects of the respondents formed the bases for validation and finalization of the 40 items by Sproles and Kendall. The eight dimensions namely, Perfectionism/high quality Consciousness, Brand Consciousness, Novelty-fashion Consciousness, Recreational-hedonistic Consciousness, Price and 'value for money' Consciousness, Impulsiveness, Confused by over-choice and Habitual, Brand loyal orientation collated to form CSI.

3.1 Description of Eight Consumer Decision-Making Styles

• **High-quality consciousness or Perfectionism:** Focuses on not compromising with quality
• **Brand consciousness:** Focuses on buying well-known and expensive brands and equating
• **high price with high quality**
• **Novelty- fashion consciousness:** Focuses on adopting to latest and new fashion, trends, fads
• **Recreational-hedonistic consciousness:** Focuses on the enjoyment related to shopping or looking for products.
• **Price and "value for money" consciousness:** Focuses on getting best value for money or sales price consciousness.
• **Impulsiveness:** Focuses on unplanned shopping or purchase.
• **Confused by over choice:** Focuses on difficulty to handle information overload.
• **Habitual, brand loyal orientation:** Focuses on buying the same brands or buying at the same stores.

Consumer Style Inventory has been parsimoniously applied by several studies in different cross-cultural contexts to analyze its applicability and validity [5,15-21].

4. Research Gap

There has been limited research on the influence of income on consumer buying decision-making in Odisha. Also, there have been sparse literature and scant studies on understanding the influence of income on consumer decision-making by using Sproles and Kendall scale [4-6]. Thus, this study, simultaneously is an attempt for validating the applicability of Consumer Style Inventory scale as proposed by (Sproles and Kendall,1986).

5. Objectives

The proposed study aims to unfurl the buying decision-making styles of different income sub- groups in Bhubaneswar and investigate if income influences the buying decision-making styles of consumers.

6. Research Framework

The present study investigates the influences of income on consumer decision-making styles. The relationship between predictor and criteria variables are shown in Figure 1.
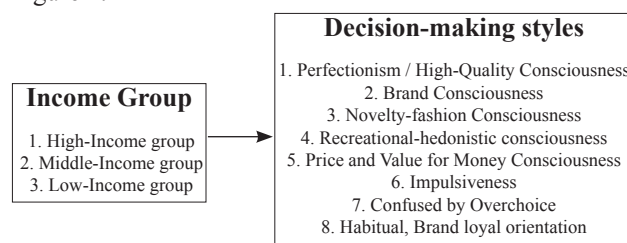

Figure 1. Proposed framework

6.1 Research Hypothesis

H1: Income has no significant influence on buying decision-making styles of consumers in Bhubaneswar city of Odisha.

The aforesaid hypothesis is general and the study intends to initially identify the major consumer decision-making styles prevalent among Bhubaneswar based consumers considering the income aspect. Since the Consumer Style Inventory provides a total picture of the decision-making styles of consumers, it would be interesting to unearth the consumer decision-making styles of income sub-groups and understand if income influences the identified decision-making styles.

7. Methodology

7.1 Research Instrument

This research was quantitative in nature involving a purposive sampling technique. The sample size was 103. Data were primary in nature and collected through Mall intercept method. A close-ended structured questionnaire was administered to collect the primary data regarding buying decision-making styles of consumers. Respondents were asked to mention about their average annual family income (in INR). The CSI developed by Sproles and Kendall was employed in this study with some minor dropping of four statements owing to validity-reliability issues. All the statements were measured on a 5-point Likert Scale ranging from Strong Disagree (1) to Strongly Agree (5). According to Sproles and Kendall, the reliabilities of CSI Scale ranged from 0.48 to 0.76.

7.2 Data Sources

The self-administered survey was undertaken and purposive sampling technique was used. Data was collected from 103 respondents from Bhubaneswar, the capital city of Odisha. Odisha is an eastern state of India. The sample consisted of 12 high-income groups (10 Lakhs INR and above), 48 middle-income group (5-10 Lakhs INR) and 43 low- income group (Upto 5 Lakhs INR). Mall intercept method was used for data collection. The data after being collected was analyzed using SPSS (version 20) and then Exploratory Factor analysis was carried. ANOVA was applied to find out the variations across regions as decision-making style is concerned.

8. Data Analysis

8.1 Reliability Test

Cronbach Alpha was used to assess the internal reliability of the 36 scale item of the questionnaire. (Out of the 40 original items of CSI, 4 items having factor loadings less than 0.4 were dropped). Cronbach Alpha coefficient was found to be .714 and since it is greater than .7

Cronbach Alpha ideal therefore the scale items possess a satisfactory internal consistency and hence reckoned statistically reliable.

8.2 Exploratory Factor Analysis

EFA is a technique that involves data reduction and allows simplification of the correlational relationship between continuous variables. Exploratory factor analysis is being used to examine relationships among key interval scaled questions and assesses the data suitability.

The Barlett's test is significant (p < .05) and KMO value is .735 which is greater than .6, hence the factor analysis is appropriate and meets the two criteria of assumption.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.735
Bartlett's Test of Sphericity	Approx. Chi-Square	2406.608
	Df	820
	Sig.	.000

Bartlett's Test of sphericity and KMO Test for sampling adequacy were found appropriate, thereby supporting the appropriateness of data/scale items for factor analytic modelling. The Principal component analysis was employed for factor extraction and orthogonal form of Varimax rotation was applied on principal component solutions. The variables whose factor loadings were greater than.50 were retained. Factors with Eigen values greater than one were extracted. The eight factors explain 58% of variance.

8.3 Component Matrix

The varimax rotation was done to extract the decisional style factors of the consumers belonging to the three income sub-groups. The eight factors were extracted by observing the rotated component matrix.

8.4 Interpretation of Factor Matrix Table

As evident from Table 2, it is found that 8 factors extracted together account for 58.28 % of the total variance (information contained in the 36 original variables). Hence, we have reduced the number of variables from 36 to 8 underlying factors.

The Table 3 depicts the rotated component matrix which aids in interpreting the factor matrix easily. The items 7,8,9,10,11 and 12 are clubbed together and form the first factor which explains 24.589% of variance. Hence, the first factor is termed as "Brand Consciousness". The second factor explains 7.818 % of variance and the items 1, 2,3,4,5 and 6 are collated to form the second factor called

Table 2. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.286	24.589	24.589	7.286	24.589	24.589	3.540	16.493	16.493
2	3.205	7.818	32.407	3.205	7.818	32.407	3.242	7.907	24.400
3	2.644	6.448	38.855	2.644	6.448	38.855	2.817	6.871	31.271
4	2.363	5.764	44.619	2.363	5.764	44.619	2.784	6.789	38.060
5	1.868	4.556	49.175	1.868	4.556	49.175	2.572	6.273	44.333
6	1.341	3.270	52.445	1.341	3.270	52.445	2.020	4.926	49.259
7	1.233	3.008	55.453	1.233	3.008	55.453	2.007	4.758	54.017
8	1.159	2.828	58.281	1.159	2.828	58.281	2.004	4.264	58.281
9	1.154	2.814	61.095						
10	1.076	2.624	63.719						
11	.990	2.416	66.135						
12	.949	2.315	68.450						
13	.900	2.196	70.646						
14	.868	2.116	72.762						
15	.837	2.041	74.803						
16	.784	1.913	76.716						
17	.744	1.815	78.531						
18	.737	1.798	80.329						
19	.711	1.733	82.062						
20	.675	1.647	83.709						
21	.661	1.613	85.322						
22	.631	1.539	86.861						
23	.602	1.496	88.357						
24	.554	1.269	89.626						
25	.534	1.243	90.869						
26	.507	1.045	91.914						
27	.495	.998	92.912						
28	.440	.947	93.859						
29	.409	.919	94.778						
30	.388	.908	95.686						
31	.361	.881	96.567						
32	.334	.814	97.381						
33	.312	.761	98.142						
34	.271	.662	98.804						
35	.258	.629	99.433						
36	.233	.567	100.000						

"Perfectionism/High Quality Consciousness". The third factor explains 6.448 % of variance and it encapsulates the items 21, 22 and 23. These accumulated items form the third factor which is "Price/Value for Money Consciousness". The fourth factor explains 5.764 % of variance and the items amalgamated under this factor are 13, 14, 15, 16 and 17. This factor is "Novelty-Fashion Consciousness". The fifth factor explains 4.556 % of variance and it is termed as "Recreational-Hedonistic shopping Consciousness". The items 18, 19 and 20 are assembled together under this factor. The sixth factor entailing items 33, 34, 35 explains a variance of 3.270 %. This factor is called as "Habitual-Brand Loyal orientation". The seventh factor explaining a variance of only 3.008 % comprises of items 29, 30, 31 and 32 and termed as "Confused by Over-choice". Items 24,25,26,27 and 28 are aggregated together to form the eighth and last factor "Impulsiveness" explaining a small variance of

only 2.828%.

Thus, for objective one, the purchase decision-making styles emerging from exploratory factor analysis are Brand Consciousness, Perfectionism/High Quality Consciousness, Price/Value for Money Consciousness, Novelty-Fashion Consciousness, Recreational-Hedonistic shopping Consciousness, Habitual-Brand Loyal orientation, Confused by Over choice and Impulsiveness.

8.5 Hypothesis Testing on the Basis of Differences in Consumer Decision-making Styles across Income Groups

To address the second objective, ANOVA was conducted to demonstrate the difference between the shopping styles of consumers across different income groups in Bhubaneswar city of Odisha.

Table 3. Rotated component matrix (Orthogonal rotation)

ITEMS	1	2	3	4	5	6	7	8
I feel it highly important to purchase the best quality products		.737						
I want to choose the products perfectly while shopping		.740						
I try to buy the very best quality products		.734						
To buy the very best quality, my efforts are also special		.678						
I have high expectations from the products that I purchase		.688						
If I find a brand or product that seems good enough, I shop quickly		.729						
Usually I buy the well-known brands	.713							
I like buying brands that are costly ones	.818							
Highly priced products are of higher quality	.813							
I get the best products from nice departmental stores and specialty stores	.695							
Best-selling brands are my preference	.643							
Brands that are most advertised are usually very good choices	.621							
It is very important for me to resort to fashionable and attractive styling				.726				
My wardrobe is kept up to date by me with the changing fashions				.566				
Very newest style of one or more outfits are possessed by me				.633				
To purchase something new and exciting is a matter of fun				.684				
For seeking variety, I shop different stores and select different brands				.670				
To go to shopping is one of the enjoyable activities of my life					.706			
I enjoy shopping just for the fun of it					.553			
I make my shopping trips fast					.618			
I purchase as much as possible at sales prices			.643					
The products of lower prices are usually my choice			.738					
I am very careful to find the best value for the money			.760					
I should make more careful planning for my shopping than I do								.779
I show impulsiveness while purchasing								.640
Often I do careless purchases which I later wish I had not								.694
For best buys, I take time to shop carefully								.638
I am careful in watching how much I spend								.699
I often feel confused to choose among so many brands							.628	
Store choosing is sometimes a harder task							.720	
More learning about products makes the choice of best products harder							.672	
I am confused by all set of information given on different products							.599	
I buy over and again my favourite brands						.612		
I usually stick to brands after finding them best						.687		
I visit the same stores each time I shop						.602		
I change the regularly buying brands						.679		

Table 4. ANOVA table for difference in decision-making styles across income groups

Consumer Decision-making style	Income group	Mean	F	Sig. (2-tailed)
Brand consciousness	HIG	3.96	34.78	0. 031
	MIG	3.47		
	LIG	2.85		
Perfectionism / High quality consciousness	HIG	3.32	2.51	0.49
	MIG	3.41		
	LIG	3.09		
Price Consciousness	HIG	3.87	32.45	0.032
	MIG	3.61		
	LIG	4.13		
Novelty-fashion consciousness	HIG	4.26	27.63	0.034
	MIG	4.09		
	LIG	3.97		
Recreational-Hedonistic shopping consciousness	HIG	3.97	21.68	0.038
	MIG	4.02		
	LIG	3.74		
Habitual-Brand Loyal orientation	HIG	3.82	24.78	0.036
	MIG	4.09		
	LIG	4.47		
Confused by Overchoice	HIG	2.21	27.39	0.034
	MIG	3.89		
	LIG	2.53		
Impulsiveness	HIG	2.89	36.03	0.027
	MIG	2.97		
	LIG	2.34		

Income Groups	Average Annual Family income (INR)
High-income group (HIG)	10 Lakhs INR and above
Middle-income group (MIG)	5-10 Lakhs INR
Low- income group (LIG)	Upto 5 Lakhs INR

9. Interpretation

From the ANOVA table, it is evident that p<0.05 for the seven factors namely Brand consciousness, Price consciousness, Novelty-fashion consciousness, Recreational-hedonism, Habitual-Brand Loyal orientation, Impulsiveness and Confused by Over choice. It indicates that statistically significant differences exist among the decision-making styles of different income sub-groups. High-income group consumers were found to be more brand-conscious and novelty-fashion conscious than other income groups. Middle income groups exhibited preponderance towards recreational-hedonism, confused by overchoice and impulsiveness. Low-income groups revealed highest price-consciousness supporting the results of the study [7]. Low income groups also scored higher in habitual brand loyalty. High-quality consciousness trait was equal for all the income sub-groups as p>0.05. This finding corroborates the findings made by the research [6]. Thus, owing to the above findings, the null hypothesis, H1: Income has no significant influence on buying decision-making styles of consumers in Bhubaneswar city of Odisha is rejected. Therefore, it can be inferred that income has a pre-dominant influence on the buying decision-making styles of the consumers in Bhubaneswar city of Odisha. In a nutshell, the high, middle and low income group consumers in the city of Bhubaneswar, located in eastern India vary in their buying decision-making styles.

10. Conclusions

This study aimed to divulge the influence of income on buying decision-making styles of consumers of different income groups such as high, middle and low income groups. Exploratory factor analysis was undertaken to determine the decision-making styles and ANOVA results indicated that striking similarities and dissimilarities existed among the decision-making styles of income sub-groups. Marketers and retailers should be very careful while designing the marketing-mix for different income groups. They should not ignore any group of consumers rather address each group effectively. In general, marketers and retailers should give focus on improving quality, fashion-novelty and brand awareness building among consumers. This can be done by offering the consumers tailored and up-to-date products. Brand

familiarity can lead to brand loyalty and keep confusion at bay. Further, it can make the shopping experience a pleasant one. The store personnel should be able to help information-seeking consumers. Marketers can adopt various loyalty programmes to augment the proclivity of brand loyal income groups. For price-conscious income-groups, marketers should provide products at affordable price-ranges, easily available in the stores in malls. Focused merchandising, visual displays and appeals, and store atmospherics may also stimulate impulsiveness among shoppers. Mall owners should offer pleasant ambience and services to the shoppers who can flock in malls with their family and friends for leisure pursuits or socialization.

A clear understanding of decision-making styles of different income groups may be warranted for marketers to predict the consumer needs and formulate effective strategies.

Income should be focused as an essential demographic element for segmenting the consumers and all income groups should be considered as distinct, identifiable and heterogeneous markets.

The study has certain limitations. Firstly, it gives suggestive evidences rather than conclusive demonstration that such a kind of variation in decision-making styles exists among different income sub-groups. Secondly, the sample size chosen was also small which may result into biasness. Thirdly, the study was restricted within a particular city of Odisha.

The study connotes that further researches can be made to investigate and verify the explanatory role of income towards the decision-making of different income groups.

References

[1] Jorgensen, J. (1979). Cross-cultural comparisons. Annual Review of Anthropology, 8,309-331.

[2] Hofstede, G. (1983). National cultures in four dimensions: a research-based theory of cultural differences among nations. International Studies of Management Organization, 13(1-2), 46-74.

[3] Babin, BJ & Harris, EG. 2012. CB4. Mason. South-Western Cengage Learning.

[4] Kamaruddin,AR & Mokhlis, S. (2003). Consumer socialization, social structural factors and decision-making styles: A case study of adolescents in Malaysia. International Journal of Consumer Studies, 27(2),145-156.

[5] Walsh, G., Thurau, T., H., & Mitchell, V.-W. (2001). Consumers' decision-making stule as a basis for market segment. Journal of Targeting, Measurement and Analysis for Marketing, 10(2), 117-131.

[6] Makgosa, R.(2014).The Role of Demographics on Decision-Making Styles of Botswana's Retail Shoppers, Research in Business and Management, 1(2), 32-54.

[7] Ailawadi, K. L., Neslin, S. A., & Gedenk, K. (2001). Pursuing the value conscious consumer: store brands versus national brand promotions. Journal of Marketing, 65(1), 71-89. http://dx.doi.org/10.1509/jmkg.65.1.71.18132.0.

[8] Turell, G. (2002). Socio-economic differences in food purchasing behavior and suggested implications for diet related health promotion. Journal of Human Nutrition and Dietetics, 15(5), 355-364.

[9] Ghani, U., & Jan, F. A. (2011). An Exploratory Study of impulse buying of Urban Consumers in Peshawar. International Conference on business and Economics Research.

[10] Zeithaml, V. A. (1985). The new demographics and market fragmentation. Journal of Marketing, 49(3), 64-75.

[11] Girard, T., Korgaonkar, P., & Silverblatt, R. (2003). Relationship of types of product, shoppin-gorientations and demographics with preference for shopping on the internet. Journal of Business and Psychology, 18(1). 101-120.

[12] Sasirekha A.(2020). Analysis on decision-making styles and clothing choice criteria of working women in buying apparel in Chennai. Journal of Information and Computational Science,10 (1),192-203.

[13] Mitra Saleh, Seyed Erfan Alhosseini, and Alireza Slambolchi (2017), A Review of Consumer Decision-Making Styles: Existing Styles and Proposed Additional Styles. International Journal of Research in IT, Management and Engineering, 7 (1), Page 33-44.

[14] Sproles, G. B., & Kendall, E. L. (1986). A methodology for profiling consumers' decision making styles. Journal of Consumer Affairs, 20(2), 267-279.

[15] Hafstrom, J. L., Chae, J. S., & Chung, Y. S. (1992). Consumer decision making styles: Comparison between United States and Korean young consumers. The Journal of Consumer Affairs, 26(1), 146-158.

[16] Durvasula, S., Lysonski, S., & Andrews, J. C. (1993). Cross-cultural generalizability of a scale for profiling consumers' decision-making styles. The Journal of Consumer Affairs, 27, 55-65.

[17] Lysonski, S., Durvasula, S., & Zotos, Y. (1996). Consumer decision-making styles: A multi-country investigation. European Journal of Marketing, 30(12), 10-21.

[18] Mitchell, V.-W., & Bates, L. (1998). UK Consumer Decision-Making Styles. Journal of Marketing Management, 14(1-3), 199-225. DOI: 10.1362/026725798784959345.

[19] Hiu, A. S., Siu, N. Y., Wang, C. C., & Chang, L. M. (2001). An Investigation of Decision‐Making Styles of Consumers in China. Journal of Consumer Affairs, 35(2), 326-345.

[20] Tarnanidis, T., Owusu-Frimpong, N., Nwankwo, S., & Omar, M. (2014). A confirmatory factor analysis of consumer styles inventory: Evidence from Greece. Journal of Retailing and Consumer Services, 22, 164-177.

[21] Nayeem, T., & Casidy, R. (2015). Australian consumers' decision-making styles for everyday products. Australasian Marketing Journal (AMJ), 23(1), 67-74.