**A Demographic Study on Customer Satisfaction about Handloom Products in India
- A Study on Andhra Pradesh State Handloom Weavers' Cooperative Society Limited
(APCO showrooms)**

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ABSTRACT

Clothing is one of the basic needs of human beings and first produced by using handlooms. Among various revolutions country has come across, there is a prominence for the industrial revolution for bringing power loom sector and mill sector in place, however this development on one hand has led to the downfall of the handloom fabric industry. Following agriculture, handloom is the second largest sector in terms of employment, as it provides direct and indirect employment for about 43 lakh weavers and associated employees. This sector contributes nearby 15percent of the cloth production in the country.

Handloom industry is very powerful in terms of exclusivity, production flexibility, scope of novelty and modernization, meeting the requirement of the suppliers promptly and such wealthy prospects in weaving tradition (Ministry of Textiles 2015). The aim of the study is to know the influence of demographic variables like gender, age, educational qualification, occupation and annual income on customer satisfaction towards handloom products.

Keywords: Andhra Pradesh State Handloom Weavers' Cooperative Society Limited (APCO), Weavers, Handloom, power loom, Customer satisfaction

1. Introduction

In the recent days, handloom industry is about 4.60 million, out of which India takes the pride of having about 3.9 million industries (Textile Committee). According to Ministry of Textiles (2015)

India produces 95% of the handlooms of the world which makes the second largest cottage and labor intensive sector after agriculture, which has been playing a vital role in the country's economy by forming part of its rich heritage, and exemplifying the

artistry of the weavers. Roughly about 15% of India's fabric contribution comes from the handloom sector, while it also exports (2811.97 crores in 2012-13) its productivity for surplus earning of the nation. India is the major producer of handlooms, while countries such as Bangladesh, Nepal and Pakistan also contribute; on the other hand, countries such as USA, France, UK and Italy are the major importers of handloom fabric and clothing. Most of these countries produce only limited supply of handloom fabrics that can just fit to their internal needs (Garg et al. 2012), in comparison to India (Pappeswari and Rajalakshmi 2013).

India has the pride of producing about 7116 million square meters handloom fabrics (Apr 2013 – Mar 2014). According to the data from Indian government, Handicraft sector is expected to grow by 16 percent during 2013-17 and another 16 percent during 2017-22 (Ramaswamy, Villvarayanallur, and Kumar 2015). The handloom industries are environmentally friendly, energy saving form of artistry among the textile sector with the outcome of sustainable textile products. Indian handloom products are as different and varied as our cultures and languages (Rakhin 2015). Natural fibers like cotton, wool, silk and jute are mainly produced without electricity and therefore, the products are eco-friendly nature. Silk, is considered as a queen of textiles dominates the textile industry with its luster, glamour and sensuousness. Silk sarees can be commonly said as India's fabric pride, because of the striking artisanship and uniqueness that our weavers exhibit in each of the saree production. Indian fabric producers have an extremely outstanding artistic sense and visual appeal which they exhibit right from choosing a fabric color to the diminutive to grandeur designs they implement in their saree productions. The endurance and the quality of the fabric speak for the pride of our weavers craftsmanship (Savithri et al. 2014).

Although handloom industry in the olden days have created unmatchable and highly adorable designs and textures of fabric, as decades pass by, the handloom trends are slowly crumbling out of existence and technology is also a reason for this pathetic state of handloom industry. In addition, although the sector provides employment generation to large part weaker section of the society such as scheduled caste and tribes but still it is largely decentralized. Not only the industry is vanishing off from existence, even the potential handloom weavers are now rarely found, because the generations today doesn't focus much on this sector. Recent Handloom census (2009-2010) indicated that there is a significant fall in total employment (Planning commission 2007). However, such decline could have significant economic and social implications. This is perhaps partly due to the impact of global recession and growing competition from decentralized power loom and mill-made sector. The sector also faces various challenges both in terms of demand and supply side perspective. In terms of supply side, the sector faces challenges in terms of inadequate infrastructure, poor marketing support; ailing distribution network has weakened an already fragile supply chain system (Hameed 2012). In addition, despite the weaver's produces rich variety of designs and textures, there is not much focus on the products quality due to various reasons (NIC 2015).

On other hand, from consumer point of view, the awareness of handloom products was considerably low (Kumudha and Rizwana 2013). This is evident from the past studies that only limited customers are aware of handloom products and cash rebate offered by the government. This shows that marketing programs is considerably weak (Kumudha and Rizwana 2013). The most significant and interesting part in marketing is the consumer behavior. It is significant due to majority of consumers indicate brand-bias in purchasing decisions which also indicate evidence in varied level of loyalty. As it has been already conceived, the effect of modern marketing would be that the business elements need to meet the requirements of consumer. This needs a thorough determination of consumer-behavior and purchasing motivation. With no such ideals

marketers might fail in segment market efficiently and design steps for an efficient penetration in the defined market sector (Davis 1976). Determining consumer-behavior is a basic ingredient in the process of marketing. On the other end increased level of westernization is relatively higher in educational achievements reflecting for societal status is responsible to make people think low about traditional customs. Therefore, understanding the customer purchase intention is imperative to plan efficient marketing programs.

1.1. Handloom Industry in Andhra Pradesh

Andhra Pradesh (AP) is found to have the second largest count of handlooms of 3.5 lakhs next to Tamilnadu. In an employment point, the looms in the state offer livelihood regarding 15 lakh workers or 5 lakh families. There are about 50 handloom clusters or bases like Chirala, Pochampalli, Gadwal, Narayanpet, Mangalagiri, Sircilla, Uppada, Dharmavaram, and Venkatagiri which has global need for their goods. Around 100 crores are the average annual exports from these clusters. In spite of an eventful path during the past, the handloom division in Andhra Pradesh has slowed down due to various issues (Reddy and Abdul 2013). In spite of various measures conducted by the government using institutional assistance and direct finance support for the handloom weavers, they are found to be in a bad state because of continuous loss and myriad issues. These issues involves uneven raw material supply, yarn's price hike, uneven marketing measures, lack in market promotion and awareness, lacking of right financial resources, intrusion of middlemen, competition of power loom and mill products etc. (Bhagavatula 2010). However, on the consumer point of view, consumer awareness was much better than previous studies as recent study reported that (Vaddi and Balakrishnaiah 2009) in Andhra Pradesh 65 % of consumers were aware about Khadi and Handloom fabrics.

Although an attempt has made to market the products still problems remains unresolved as the purchase behavior is as comparatively lower than other non-handloom products. Therefore, the present study made an attempt to understand the purchasing intention of consumers and their satisfaction towards handloom products. Current study is aimed to focus on Andhra Pradesh State Handloom Weavers' Cooperative Society Limited popularly known as "APCO" (Lakshmipathi and Dayashankar 2001) is the Apex handloom cooperative society of Andhra Pradesh. Formed in 1976, this society had an objective to create a large market base for the affiliated primary cooperative weavers' societies and to make sure that the inputs are promptly available to the weavers (APCO 2013). With 12 divisional marketing officers functioning across all the major districts, APCO provides support for about 1083 employees. APCO maintains its marketing network of about 189 sales outlets, among which 168 are in Andhra Pradesh and the remaining 21 are spread across other states.

The study aimed to investigate the customer satisfaction who has visited APCO. Further, by examining their different reasons for purchase would enable the APCO to design appropriate marketing strategies viable for the industry. In addition, the study would also enable to redesign their products in comparison to the competitors, in terms of pricing, segmentation, quality to ensure sustainability. The findings would also shed light on customer satisfaction of APCO products which would enable organization to identify areas of operations that do not meet customer expectations.

2. Review of Literature

Though the technological competition is high, handloom industry made it up to exist with prominence through the delicate and unique fabrics they use in weaving adorable handloom clothing.

2.1. Consumer Satisfaction Studies

Kumudha and Rizwana (2012) analysed the promotion mix of handloom products with special reference to Handloom weavers cooperative Society. This study falls

under empirical research. The data was collected from the primary sources. Stratified Random sampling technique was used to select a sample of 140 societies in Erode District. The following tools were employed to analyse the data like mean, Chi-square ($\chi 2$) test, and Henry Garrett Ranking and Multiple Regression analysis. The study findings revealed that Handloom is a traditional cottage industry offering millions of employment opportunity to millions of weavers in India but recently the industry is facing lot of problems and going towards the decline stage. Though there are various reasons which acts as the factors responsible for the extinction of Handloom Sector, promotion is one of the key area and hence the considerable efforts has to be put for the betterment of the handloom products.

Pappeswari and Rajalakshmi (2013) studied the consumer satisfaction towards the role of VOC Co-optex in Tuticorin. The findings revealed that the consumer satisfaction was medium (56%) while the opinion on level of satisfaction of the respondents is independent of age, sex, educational qualification, occupation and monthly income.

Deshmukh (2013) concentrated on the analysis of the target customers buying behavior for handicrafts and handlooms products of CIDCO's (City and Industrial Development Corporation of Maharashtra) Urban Haat project which has been the policy of Government of India's in setting up permanent marketing functions at primal locations in the nation to discard middle agencies. Determining Consumer Buying Behavior provides higher content to consumers. We infer that the project has embraced the purchase decision process Marketing Concept, and is consumer targeted. The objective of this analysis is to determine target consumers, aspects that influence purchase decision mode and to evaluate if the product meets targeted consumer's needs. Hence survey was performed by close ended questionnaire from a random sample size of 100 respondents. The results indicate that young male and female who are the professionals from

middle class family have been the targeted consumers who have higher influence in the purchasing decision process of handcraft and handloom product. Yet their requirements are not compelling due to cost and various reasons. Also high class customers were not found to be attracted in this process.

Goswami and Jain (2014) conducted a study to identify the shortfalls the weaving industry is facing today and they came up with ideas and strategies to overcome the same. The research was used two government organizations Rajasthan Rajya Bunkar Sahkari Sangh (RRBSS), and Rajasthan Handloom Development Corporation (RHDC). This study was conducted based on semi structured interview schedule, observation method and many other secondary sources. Through the study, it was found that the handloom industry did not pursue any specialized strategies for procuring raw materials, product planning and especially for marketing their fabrics. On finding out the problems, a clear strategy was derived to bring in more profit for the handloom sector.

Rani and Bains (2014) analyzed the consumer behavior towards handloom products in state of Haryana and Punjab. This study further analyzed the allied workers and handloom weaver's position. From the analysis, the study observed various factors impact the consumer behavior and the study found out this industry gives employment opportunities to poor people.

Tanusree (2015) aims to understand the various problems of Handloom Weavers of Varanasi in Uttar Pradesh. The problems are invention of new technology (power-loom), capitalist control, drop off in wages, increased price of yarn, and so on. The present study is descriptive in nature. The data have been collected through the in-depth interview, semi structured interview, case study and focused group discussion. The study findings revealed that the handloom weavers of Varanasi have lost their prestigious traditional industry. It has occurred due to the industrialization in all over India. The capitalist production, invention of power loom, increasing price of

yarn, low wages and labour problem are pushed to handloom to an end. The production system is mostly under the control of a particular entrepreneurial class Gaddidar or master weaver. The Gaddidar possesses capital and power that they can control over the production unit and labour. The weavers do not sustain their life with the handloom. The handloom industry is one of the major industries that need immediate care and attention. With this declining trend in the handloom sector the problems of unemployment will aggravate. So the policy maker should realize the importance of handloom sector and allocate the required funds for the uplift of handloom weavers to avoid the decline in handloom industry.

From the previous studies it is found that only few studies were made on handlooms by considering Andhra Pradesh. Most of the studies were conducted in Tamilnadu towards handlooms. However, majority of the studies revealed the consumer awareness, attitudes towards handloom products but there is only limited studies focused on study the demographic variables on customer purchase intentions AP consumers and their satisfaction towards handloom products. In order to bridge this gap, the present study made an attempt to understand the purchasing intention of AP consumers and their satisfaction towards handloom products.

2.2. Objective

- To understand the customer satisfaction about handloom products.
- To study the influence of demographic variables on customer satisfaction towards handloom products

3. Methodology

The present study adopted quantitative methodology. The data is collected from the showrooms that are selected on the basis of the sales value for the past 5 years (from 2008-09 to 2012-13) available from the APCO head office. Out of 12 divisions the Secunderabad division's has highest sales in the years 2008-09 to 2011-12 and has second highest sales in the year 2012-13 (refer

annexure I). And the top 5 selling showrooms out of 20 are located in Secunderabad division. The study is based on both the primary and secondary data. The study is diagnostic in nature to identify the influence of demographics on purchase intention towards handloom products using purposive sampling technique. A sample size of 130 customers was selected from 11 showrooms located in Secunderabad division. A structured questionnaire was administered to the customers who visit APCO showrooms. Purchase intention is measured on a five point scale (Strongly disagree to buy 1 to strongly agree to buy 5) with respect to demographic variables.

4. Results –Introduction

The current study is related to customers' satisfaction about handloom products. The data was collected through the questionnaire. It was first entered to the excel file. After that it was exported to SPSS 20.0. Initially, the data was checked through reliability and factor analysis. The hypotheses were tested through statistical tools like cross tabulation, independent sample t-test, multiple regression analysis and Analysis of covariance.

Chi-square test is used to find out the association between two categorical variables. Independent sample t-test is used to ascertain whether two variables are equal or not. Impact of more than two independent variables on one dependent variable is calculated by multiple regression analysis. Analysis of Covariance test is used to check whether there is an effect of independent variable on dependent variable after controlling some variables (like gender, age group, and so on)

Table 1 shows the frequency analysis for demographical aspects of respondents. From this analysis, majority of female (58.5%) were participated compared with male (41.5%) respondents. When considered the age groups of respondents, most of the respondents were belonged to 26-35 years followed by, 29 percent were 36-45 years age group, 25 percent were 19-25 years and only 15 percent were above 45 years age group. In

addition, majority of the respondents (75%) were married and only 25 percent were unmarried. When considered the respondents' educational qualification, most of the respondents (37%) were completed graduation which is followed by, 28 percent were completed post-graduation, 15 percent were completed professional degree and so on. In the study, most of the respondents (28%) were worked in private sectors and 23

percent were worked in government sectors. Most of the respondents' (42%) residence location was urban, 30 percent of respondents' residence location was metros and so on. When considered the respondents' income levels, majority of the respondents (35%) were earned 20001-30000 per month. In addition, most of the respondents (41%) were associated with handloom products for 5-10 years.

Table 1. Frequency for demographical characteristics I (n=130)

Demographical characteristics	Frequency (n)	Percent (%)
Gender		
Female	76	58.5
Male	54	41.5
Age groups		
19-25 years	33	25.4
26-35 years	40	30.8
36-45 years	38	29.2
Above 45 years	19	14.6
Marital status		
Married	97	74.6
Unmarried	33	25.4
Educational levels		
Professional	20	15.4
PG and above	37	28.5
Graduation	48	36.9
Intermediate	4	3.1
Below SSC	5	3.8
SSC	6	4.6
Illiterate	10	7.7
Occupation levels		
Entrepreneur/self employed	33	25.4
Govt. service	30	23.1
PVT service	37	28.5
House wife	14	10.8
Student	10	7.7
Unemployed	4	3.1
Others	2	1.6
Location of residence		
Rural	17	13.1
Semi urban	19	14.6

Urban	55	42.3
Metros	39	30.0
Average monthly income		
Below 10000	27	20.8
10001-20000	26	20.0
20001-30000	46	35.4
30001-40000	10	7.7
Above 40000	21	16.2
Association with handloom products		
Below 1 year	8	6.2
1-5 years	48	36.9
5-10 years	53	40.8
10 years & above	21	16.2

Table 2 presents the reliability analysis with descriptive statistical measures. Product and retailer specific variables contain the number of items 8 and 3 respectively. Cronbach's alpha values reveal that the items of product and retailer specific variable have the strong internal consistency of data.

Table 2. Reliability Analysis with descriptive statistics

Factors	No. of items	Mean	SD	Cronbach's alpha
Product specific variables	8	3.322	0.664	0.686
Retailer specific variables	3	3.452	0.779	0.691

Table 3 shows the factor analysis for independent variables. This analysis extracted 3 items for the factor named as 'Retailer specific variables'. Factor loading value of this factor is ranged from 0.768 to 0.501 that indicates that all these 3 items are highly correlated with this factor with 28 percent of the amount of variation. Furthermore, it extracted eight items for the factor named as 'product specific variables' where factor loading value of this factor is ranges between 0.851 and 0.320. It reveals that all these eight items are highly correlated with the factor job satisfaction and explained 15 percent of a number of variations. Therefore, based on the analysis, two factors were extracted.

Table 3. Factor Analysis

	Component		% of Variance explained
	1	**2**	
After sales service is up to the mark	.768		**28.31**
Introduction of new products is more	.689		
Handloom product accessibility is good	.501		
The quality of the product is good		.851	**14.78**
The color combinations are attractive		.757	
The design patterns of handloom fabrics are unique		.685	
Durability of the product is high		.663	
Product range in handlooms is good		.452	
The texture of the product is appealing		.440	

More number of varieties are available in handlooms	.417	
The price of the product is reasonable	.320	

Hypothesis (H$_1$): There is an association between gender and overall satisfaction

Table 4 presents association between gender and overall satisfaction. From this analysis, most of male and female respondents were satisfied with handloom products. In addition, the significance value (p-value<0.05) reveals that there is an association exists between gender and overall satisfaction. Hence the hypothesis *'(H$_1$): There is an association between gender and overall satisfaction'* is accepted.

Table 4. Association between gender and overall satisfaction using chi-square test

Gender	Overall Satisfaction					Total
	Highly dissatisfied	**Dissatisfied**	**Neither dissatisfied nor satisfied**	**Satisfied**	**Highly satisfied**	
	n (%)					
Female	2 (1.5)	7 (5.4)	25 (19.2)	33 (25.4)	9 (6.9)	76 (58.5)
Male	0 (0)	13 (10.0)	15 (11.5)	26 (20.0)	0 (0)	54 (41.5)
Total	2 (1.5)	20 (15.4)	40 (30.8)	59 (45.4)	9 (6.9)	130 (100.0)

Phi-value: 0.313 p-value: 0.012<0.05

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.313	.012
	Cramer's V	.313	.012
N of Valid Cases		130	

Hypothesis (H$_2$): There is an association between age groups and overall satisfaction

Table 5 shows association between gender and overall satisfaction. From this analysis, most of less than 45 and above 45 years age group respondents were satisfied with handloom products. However, the significance value (p-value>0.05) exhibits that there is no association between age group and overall satisfaction. Hence the hypothesis *'(H$_2$): There is an association between age groups and overall satisfaction'* is rejected.

Table 5. Association between age group and overall satisfaction using chi-square test

Age groups	Overall Satisfaction					Total
	Highly dissatisfied	Dissatisfied	Neither dissatisfied nor satisfied	Satisfied	Highly satisfied	
	n (%)					
Less than 45	2 (1.5)	9 (6.9)	26 (20.0)	32 (24.6)	4 (3.1)	73 (56.2)
Above 46	0 (0)	11 (8.5)	14 (10.8)	27 (20.8)	5 (3.8)	57 (43.8)
Total	2 (1.5)	20 (15.4)	40 (30.8)	59 (45.4)	9 (6.9)	130 (100.0)

Phi-value: 0.185 p-value: 0.351>0.05

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.185	.351
	Cramer's V	.185	.351
N of Valid Cases		130	

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

Hypothesis (H₃): There is an association between income levels and overall satisfaction

Table 6 provides association between income levels and overall satisfaction. From these results, majority of all income group respondents were satisfied with handloom products. In addition, the significance value (p-value<0.05) indicates that there is no association between income level and overall satisfaction. Hence the hypothesis *'(H₃): There is an association between income levels and overall satisfaction'* is accepted.

Table 6. Association between income levels and overall satisfaction using chi-square test

Income groups	Overall Satisfaction					Total
	Highly dissatisfied	Dissatisfied	Neither dissatisfied nor satisfied	Satisfied	Highly satisfied	
	n (%)					
Below 10000	0 (0)	9 (6.9)	6 (4.6)	7 (5.4)	5 (3.8)	27 (20.8)
10001-20000	2 (1.5)	3 (2.3)	9 (6.9)	12 (9.2)	0 (0)	26 (20.0)
20001-30000	0 (0)	5 (3.8)	16 (12.3)	23 (17.7)	2 (1.5)	46 (35.4)
30001-40000	0 (0)	2 (1.5)	2 (1.5)	6 (4.6)	0 (0)	10 (7.7)
Above 40000	0 (0)	1 (0.8)	7 (5.4)	11 (8.5)	2 (1.5)	21 (16.2)
Total	2 (1.5)	20 (15.4)	40 (30.8)	59 (45.4)	9 (6.9)	130 (100.0)

Phi-value: 0.474 p-value: 0.023<0.05

Hypothesis (H₄): There is no difference between male and female respondents based on the response in relation to handloom products

Table 7 shows difference between male and female respondents based on the response in relation to handloom products. The significance values (p-value>0.05) of overall satisfaction, product and retailer specific variable exhibits that there is no significant difference between male and female respondents based on the response in relation to these variables. (i.e) Both male and female respondents say the homogeneous response in relation to product specific variable, retailer specific variable and overall satisfaction of handloom products. Hence the hypothesis *'(H₄): There is no difference between male and female respondents based on the response in relation to handloom products'* is accepted.

Table 7. Difference between male and female respondents based on the response in relation to overall satisfaction, product and retailer specific variables

Variables	Gender		t-value	p-value
	Male (n=76)	Female (n=54)		
	Mean±SD			
Product specific variable	3.31±0.69	3.34±0.64	-0.195	0.846
Retailer specific variable	3.31±0.83	3.36±0.71	-0.411	0.682
Overall satisfaction	3.53±0.92	3.24±0.82	1.826	0.070

Hypothesis (H₅): There is no difference between less than 45 and above 45 years age group respondents based on the response in relation to handloom products

Table 8 presents the difference between less than 45 and above 45 years age group's respondents based on the response in relation to handloom products. The significance values (p-value>0.05) of overall satisfaction, product and retailer specific variable exhibits that there is no significant difference between both age group respondents based on the response in relation to these variables. (i.e) Both age group respondents say the homogeneous response in relation to product specific variable, retailer specific variable and overall satisfaction of handloom products. Hence the hypothesis *'(H₅): There is no difference between less than 45 and above 45 years age group respondents based on the response in relation to handloom products'* is accepted.

Table 8. Difference between less than 45 years and above 45 years age group's respondents based on the response in relation to overall satisfaction, product and retailer specific variables

Variables	Age groups		t-value	p-value
	< 45 (n=73)	45 and above (n=46)		
	Mean±SD			
Product specific variable	3.29±0.74	3.36±0.56	-0.535	0.594
Retailer specific variable	3.41±0.83	3.22±0.70	1.409	0.161
Overall satisfaction	3.37±0.87	3.46±0.91	-0.549	0.584

Hypothesis (H₆): Product and Retailer specific variables do the positive and significant influence on overall satisfaction

Table 9 presents association between product, retailer specific variables and overall satisfaction through multiple regression analysis. The significance value of product and retailer specific variable (p-value<0.05) indicate that these two variable do the significant impact on overall satisfaction. In addition, product and retailer specific variable can able to explain 46 percent variation in overall satisfaction (Adjusted R^2 value=0.461). Also, the beta

coefficients of product and retailer specific variable are positive. Hence, product and retailer specific variables do the positive and significant influence on overall satisfaction.

Hence the hypothesis *'(H₆): Product and Retailer specific variables do the positive and significant influence on overall satisfaction'* is accepted.

Table 9. Impact of product and retailer specific variables on overall satisfaction

	Unstandardized Coefficients		Adjusted R-square value	F value	t-value	p-value
	Beta	SE				
(Constant)	.173	.316			.548	.585
Product specific variable	.603	.102	0.461	54.403	5.930	.001**
Retailer specific variable	.370	.087			4.268	.001**

Dependent variable: Overall satisfaction

Hypothesis (H₇): There is an effect of product specific variables on overall satisfaction controlling for demographical details

Table 10 shows the effect of product specific variables on overall satisfaction controlling for demographical details. All the significance values (p-value>0.05) except the interaction effect of product specific variable*gender*age group*education, indicate that there are effects of product specific variable on overall satisfaction for controlling gender, age group, occupation and income level based on the homogeneity of regression assumption. But, there is no effect of product specific variables on overall satisfaction controlling for education level (p-value). Hence the hypothesis '(H₇): There is an effect of product specific variables on overall satisfaction controlling for demographical details' is partially accepted.

Table 10. Effect of product specific variables on overall satisfaction controlling for demographical details

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	49.228[a]	18	2.735	5.820	.000	.486
Intercept	44.584	1	44.584	94.871	.000	.461
Product specific variable	2.588	2	1.294	2.754	.068	.047
Product specific variable*gender	1.095	2	.548	1.165	.316	.021
Product specific variable*gender*age group	1.802	2	.901	1.917	.152	.033
Product specific variable*gender*age group*education	3.187	2	1.594	3.391	.037	.058
Product specific variable*gender*age group*education*occupation	.199	2	.100	.212	.809	.004
Product specific variable*gender*age group*education*occupation*income	.018	2	.009	.019	.981	.000
Error	52.164	111	.470			
Total	1611.00	130				

Corrected Total	101.392	129				
a. R Squared = .486 (Adjusted R Squared = .402)						

Dependent Variable: Overall Satisfaction

Hypothesis (H_8): There is an effect of retailer specific variables on overall satisfaction controlling for demographical details

Table 11 presents the effect of retailer specific variables on overall satisfaction controlling for demographical details. The significance values (p-value>0.05) reveal that there are effects of retailer specific variable on overall

satisfaction for controlling education and occupation level based on the homogeneity of regression assumption. But, there is no effect of retailer specific variables on overall satisfaction controlling for gender, age group and income level (p-value). Hence the hypothesis '(H_8): There is an effect of retailer specific variables on overall satisfaction controlling for demographical details' is partially accepted.

Table 11. Effect of retailer specific variables on overall satisfaction controlling for demographical details

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	63.481[a]	21	3.023	8.612	.000	.626
Intercept	99.696	1	99.696	284.013	.000	.724
retail	1.958	2	.979	2.789	.066	.049
Retailer specific variable*Gender	7.249	3	2.416	6.884	.000	.161
Retailer specific variable*Gender*Age group	3.270	3	1.090	3.105	.030	.079
Retailer specific variable*Gender*Age group*Education	1.887	3	.629	1.791	.153	.047
Retailer specific variable*Gender*Age group*Education*Occupation	.222	3	.074	.211	.889	.006
Retailer specific variable*Gender*Age group*Education*Occupation*Income	4.370	3	1.457	4.149	.008	.103
Error	37.911	108	.351			
Total	1611.000	130				
Corrected Total	101.392	129				
a. R Squared = .626 (Adjusted R Squared = .553)						

Dependent Variable: Overall Satisfaction

4.1. Summary of the finding

The present study concluded that majority of gender; all age group and income group respondents were satisfied with handloom products. In addition, there were an association exist the following variables

namely, gender Vs. overall satisfaction and income group Vs. overall satisfaction. Also, all age group, both male and female respondents said the homogenous response in related to product and retailer specific variables of handloom products. Based on the

multiple regression analysis, Customers' overall satisfaction was depended on product and retailer specific variables of handloom products. In addition, product specific variables did the effect on customers' overall satisfaction, after controlling gender, age group, occupation and income level. The same manner, retailer specific variables did the effect on customers' overall satisfaction, after controlling education and occupation levels.

5. Conclusion and Discussion

From the study it has been found that the handloom industry has been adequately facing huge competition from power loom and miller-made sector. Apart from that inadequate infrastructure, poor marketing support and weakening distribution network has depleted an already fragile supply chain system. Also customers are not fully aware of the handloom industry. In many cases consumers do not even have knowledge about the industry. Hence a first step of bringing in a huge awareness need to be performed among the public, followed by design steps for an efficient penetration in the defined market sector. A detailed consumer-behavior report will greatly assist the process. A need for targeting the younger generation would be the prime focus of change. Variables of male female customer satisfaction need to be evaluated and incorporated into the system to enhance the sales of handloom products and to efficiently handle the market competition.

Further the study can be carried out on exporting the Handloom fabrics as there is tremendous demand for these products abroad. Handloom industry contributes about 11% of the cloth production in India, while it also contributes for importing. India takes the pride of contribution 95% of handloom fabrics to the entire world (Ministry of Textiles 2015).

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Division wise sales of last (5) years

(Rs in Lakhs)

Sl. No.	Name of the Division	SALES					
		2008-09	2009-10	2010-11	2011-12	2012-13	TOTAL
1	Srikakulam	382.75	406.05	460.62	590.05	498.74	2338.21
2	Vizianagaram	519.95	552.70	559.97	781.20	678.87	3092.69
3	Rajahmundry	452.13	442.98	521.34	539.89	477.30	2433.64
4	Vijayawada	624.01	736.12	723.69	748.33	716.59	3548.74
5	Tirupathi	423.76	397.86	520.02	486.88	24.77	1853.29
6	Kadapa	229.05	184.10	206.19	265.94	295.71	1180.99
7	Ananthapur	511.37	561.36	512.13	521.17	492.96	2598.99
8	Kurnool	376.74	360.92	383.58	540.36	431.78	2093.38
9	Karimnagar	370.67	326.72	360.69	489.24	1074.97	2622.29
10	Warangal	453.18	429.49	493.05	642.64	1276.43	3294.79
11	Hyderabad	130.05	149.52	173.04	200.16	47.45	700.22
12	Secunderabad	1078.37	1020.16	906.69	1071.49	1266.34	5343.05
	TOTAL:	5552.03	5567.98	5821.01	6877.35	7281.91	31100.28

Annexure II

Handloom cloth production

S.No.	Year	Cloth production by Handloom sector	Share of handloom in the total cloth production (Mn.Sq.Mtrs)	Ratio of handloom to powerloom	Total cloth production
1	2008-09	6677	15.9	1:5.04	42121
2	2009-10	6806	14.9	1:5.41	45819
3	2010-11	6900	14.6	1:5.59	47083
4	2011-12	6901	14.8	1:5.42	46600
5	2012-13	952	14.6	1:5.47	47408
6	2013-14	7116 (P)	15.01	1;5.29	47388
7	2014- 15 (upto sep. 2014	3547	14.73	1:5.78	24065