

3.5.1 Regression Statistics (Table-1)

Regression Statistics							
Multiple R	0.58369186						
R Square	0.34069619						
AdjustR-square	0.3178037						
Standard Error	0.227793						
Observations	150						
ANOVA							
	df	SS	MS	F	Significance F		
Regression	5	3.86122347	0.772245	14.88244	9.19245E-12		
Residual	144	7.472109863	0.05189				
Total	149	11.33333333					
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%
Intercept	1.14340101	0.635690394	1.798676	0.074164	-0.11308878	2.39989079	-0.11308878
(Vision)	-0.0531751	0.058283045	-0.91236	0.363104	-0.16837594	0.06202569	-0.16837594
(Taste)	0.31092608	0.087640631	3.547739	0.000525	0.137697791	0.48415436	0.137697791
(Smell)	0.20586908	0.051334328	4.010359	9.7E-05	0.104402927	0.30733523	0.104402927
(Touch)	0.03212449	0.065719017	0.488816	0.625716	-0.09777408	0.16202306	-0.09777408
(Sound)	0.27438279	0.082273148	3.335022	0.001085	0.111763739	0.43700185	0.111763739

3.5.2 Chi-Square Statistic

Based on our hypothesis to test the dependency of the senses on the age groups chi-square test would be the best fit.

Chi-Square Test							
		Sensory Marketing					
	Smell	Vision	Touch	Sound	Taste	Total	
Age	Observed Frequency						
15-19	15	5	20	5	5	50	0.333333
20-29	5	15	10	10	4	44	0.293333
30-39	6	4	5	5	3	23	0.153333
40-49	5	4	5	2	1	17	0.113333
50-59	2	2	4	4	4	16	0.106667
Total	33	30	44	26	17	150	

	Expected Frequency						
	11	10	14.66667	8.666667	5.666667		
	9.68	8.8	12.90667	7.626667	4.986667		
	5.06	4.6	6.746667	3.986667	2.606667		
	3.74	3.4	4.986667	2.946667	1.926667		
	3.52	3.2	4.693333	2.773333	1.813333		
	P-value		0.05				
	Test Statistics		0.129743				

4.1 Interpretations:

Table above provides model summary of the regression model which indicates the customer satisfaction as a function of service quality dimensions. The R value (0.58) presented in the model summary table indicates positive correlation among all five attributes under study. The R2 (0.34) value indicates how much of the total variation in the dependent variable (overall satisfaction) is being explained by the independent variables. In this study, R2 is 0.34, indicating that 34% of the variations in the overall impact on customer’s buying behavior are explained by five different senses of sensory marketing. Results of the ANOVA also show that the regression model predicts the dependent variable significantly well. F-statistics state that the overall model is highly significant and a good fit at the 5% level ($0.00 \leq 0.05$) of significance, indicating that the model is significantly having positive impact on buying behavior of the customer.

The multivariate regression model can be written as:

$$\text{Overall impact on Buying Behavior} = 2.213 + (-0.05) (V) + (0.31) (T) + 0.20(S) + 0.03(To) + 0.27(So)+\text{Error}$$

As observed in the above multivariate regression model, only vision seems to have negative impact on buying behavior of consumers. Further some considering all other variables understudy including Touch, Taste, Smell and Sound had positive impact on the Consumer buying behavior. As observed from the result above from Table-2, we conclude that **at 5% level** of significance chi-square value will be 0.129. Finally, we conclude that there is no sufficient evidence to accept Ho. We reject H06 and accept the alternative hypothesis. Age and type of sense both are dependent on each other.

4.2 Conclusion and Recommendation:

In this paper, an attempt has been made to investigate the impact of sensory marketing on buying behavior of consumers. The results of regression analysis indicate that out of 5 attributes of Sensory Marketing, 4 of them have a positively significant effect on the overall customer satisfaction. The results of the study have significant implications to understand the pattern of customer buying behavior pertaining to various senses. Chi-square model also suggested that age group and various senses are dependent on each other.

4.3 Limitation of the Study

The time frame and the sample size of the study were limited. The study considered five attributes of Sensory Marketing and also assigned equal weights for these dimensions. After observing the results, it was realized that taking more attributes under study can improve the accuracy of the model, which can be done by including various other types of marketing impacts along with sensory marketing. One more issue which was faced was the response rate. Out of 750 questionnaires sent through various modes, turn up ratio was only 20%.

4.4. Disclosure statement

No potential conflict of interest was reported by the authors.

5.References

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