



CONSUMER PSYCHOLOGY WITH SENSORY MARKETING EFFECT FROM CANONICAL CORRELATION ANALYSIS

Chandrasekaran S*

Dr. K. Chandrasekar**

Abstract: *The store environment plays a vital role in creating good shopping experience to consumers. It also refers to the environment that gives a coordinated visual display of merchandise and the ease of mobility within the store. Where, the emotional reaction is activated by the physical evidence it directly influences the shopping behaviour of consumers. Marketers, try to attract the consumer for buying and remembering their product/service through sensory marketing. They required not only to build a relationship with their consumers but to make them involve by appealing to their senses. Thus, eateries are adopted the multiple senses in their store for retaining their consumers. The present study investigates the consumer psychology with sensory marketing of organized eateries in Chennai city through spending more time factors with their psychological effect of sense of sight and taste.*

Keywords: *Sensory marketing, Consumer psychology, Eateries, Eat out, Canonical correlation*

*Research Scholar, Alagappa Institute of Management, Alagappa University, Karaikudi, Tamil Nadu

**Assistant Professor, Alagappa Institute of Management, Alagappa University, Karaikudi, Tamil Nadu



1. INTRODUCTION

Today, *restaurants/eateries* cope with the commitment of attracting more and more consumers, by developing brand loyalty and keeping their marketing strategies. The marketing tools used in order to do those commitments are wide-ranging into the general *marketing mix*. For instance, restaurants using many strategies to develop their brand image for reaching the place of consumer's first choice. They have to find new tools besides the ones they commonly use such as low-prices strategy or timesaving. To add to these, the role of the senses for individual's perception about surroundings has attracted different disciplines, revealing its multidisciplinary nature and importance (Howes, 2005). Particularly, the evolution of *neuroscience*, *psychology*, and *marketing research* have allowed interesting experimental results with neurological explanations, showing the importance of the relationship among the three fields in the rise of sensory marketing (Krishna, 2010). Though, growing interest in sensory marketing among food retailers means that the indulgence of all the senses has an important role in the individual's consumption experience.

The Food & Beverages (F&B) retail coined are casual/fine dining restaurants, quick service/fast food restaurants, food courts, cafes in the organized sector and the numerous *street corner* eateries in the unorganized sector. The fast organized eateries in India have evolved with the changing lifestyle of the Indian consumers. In addition, the entry of multinational food chains has created a rigid competitive scenario in terms of business with both national and international firms jostling for profits and market share. Hence, the *sense appeals* are popularized and implemented by organized retailers as product nature, branding, store image and experiential marketing but it was highly complicated regarding consumer sensation. One of the best ways to raise the service level is by knowing the consumer psychology. Consequently, the focus of this study will be on how consumers perceive by sensory attributes in organized eateries by knowing their psychology through service.

2. STATEMENT OF THE PROBLEM

In F&B retail, the consumer will expect to be served as most pleasant atmospherics and quick response is one of the aims of organized restaurant. The sensory marketing can make consumers stay longer at the premises, by enjoying the store environment. Even though, eateries may have various elements of atmospherics in their shops, they have to identify to



what extent of sensory cues that cohesion with consumer psychology, because the results may be retaining the consumer or left them or none of any impact. This problem is dealt with in this study, is explored, justified it, and further it is necessary to give a model for coherence of consumer psychology and sensory marketing.

3. OBJECTIVES OF STUDY

1. To investigate whether the store atmospherics have any influence on consumers' length of time of spent in store
2. To examine whether the sensory cues have any impact on the consumers' psychological factors during the service or after exit

4. SCOPE OF RESEARCH

This study intends to find out, what happens regarding the coherence of consumer psychology with sensory marketing. It, discusses the activities, trend, scope of both factors in terms of F&B retail industry which will help to know the reliability of research in current market. The study derived the realities of store atmospherics and consumer psychological effects during the service. Further, it is useful to have an idea of the profile of study area for the opportunities of food retail market.

5. HYPOTHESIS OF THE STUDY

H₀₁: Spending more time factors has no influence on consumer psychological effects

H_{0a}: Spending more time factors has influence on consumer psychological effects

6. RESEARCH METHODOLOGY

The research design was decided with two phases of process, to explore the problem and describe the sensory elements influencing consumer psychology towards food retail format choice. This study is concerned only with the emerging cuisines of F&B retail industry such as, *Pizzas*, and *Burger & Sandwiches* shops at Chennai city in Tamil Nadu. First, the study has used the *stratified sampling* for selecting eateries from the total sample unit at random wise. In addition, the respondents' selection is on the basis of *judgement sampling* from non-probability which the researcher has followed with some basic criterion. Since, the consumer population rate is unknown for this research the infinite population sample size formula is applied, according to Bill Godden (2004),

$$SS = \frac{Z^2 \times P \times (1-P)}{C^2}$$



By, applying 95 percent confident level for select sample distribution and population picking choice at 50 percent (0.05) with 4 percent of confidence interval among sample selection, get sample size as follows,

$$SS = \frac{3.84 \times 0.5 \times (0.5)}{(0.0016)}$$

Therefore, Sample Size = **600**

Where,

SS = Sample Size

Z = Z-value (1.96 for a 95 percent confidence level)

Z-values (Cumulative Normal Probability Table) represent the probability that a sample will fall within a certain distribution.

P = Percentage of population picking a choice, expressed as decimal (50 percent)

C = Confidence interval, expressed as decimal (4 percent = +0.04, - 0.04 percentage)

The minimum sample size is the easiest to proportion among all the eateries according to which 15 consumers were interviewed in each eatery. The *Table 1.1* shows the sample distribution of eateries as well as consumers used for the research.

Table 1.1 Sample Distributions

S.No	Pizzas	Eatery Sample Size	Respondents Sample Size	Burgers & Sandwiches	Eatery Sample Size	Respondents Sample Size
1	Dominos (35)	8	120	McDonald's (10)	2	30
2	Pizza Hut (19)	4	60	KFC (27)	6	90
3	Pizza Corner (17)	4	60	Subway (44)	9	135
4	Papa Johns (16)	4	60	Marrybrown (13)	3	45
Total	87	20	300	94	20	300

In order to make the study relevant, the questionnaire-cum-interview method is considered the best instrument for this study. The H_{01} was tested through *canonical correlations* analysis to predict the effects of spending more time factors with psychological effects (sight and taste).

7. MARKET OF ORGANIZED EATERIES

The rapid growth of organized food segment allow fast food restaurants format for getting quick profit. This restaurant having common menu over the counter and provides no wait



staff. While customers typically pay before eating and choose and clear their own tables. It is also known as *quick serve restaurants* (QSR) which creates instant interest in the mind of the consumer. It has, *mass appeal, ambience, unique experience, and a strong brand identity*. In an effort to maintain the same experience across outlets, the service, interiors and menu items are standardized. Thus, QSR is different from fine dining; usually they target rich and upper middle class consumers by offering a unique ambience and experience. Fine dining restaurants do not compete directly with them, except moderate casual dining. It is an important note that, QSRs typically target customers within the age group of 18-40 years but, casual dining restaurant would target people of all age groups. QSRs are able to compete with casual dining restaurants on the basis of factors such as stability in quality and speed of delivery.

8. CONSUMER PSYCHOLOGY WITH SENSORY MARKETING

The '*consumer psychology*' includes that, consumer thoughts, beliefs, feelings and perceptions as influence and how they are involved to buy relating to product or services. *American Psychological Association* (APA) defines consumer psychology as, that which "*employs theoretical psychological approaches to understanding consumers*". Though, consumer psychology is often considered a sub-speciality of *organizational psychology* it is also known as *consumer behaviour* or the *psychology of marketing*. In essence, marketing makes use of techniques and findings from the other behavioural sciences, such as psychology and sociology. Marketing with human senses based on consumer psychology is known as '*Sensory Marketing*', invented by academician. In this, the marketers employ all kinds of sense marketing strategies without knowing the integration of sense impact. Generally, sensory marketing is defined by Aradhna Krishna (2010), "*as a marketing strategy that engages the consumers' senses and thus affects their behaviour*". Unpredictably, we are unaware of the process of our senses which interact with our day-to-day experience. While engaging the senses in the retail store, the decision-making process might affect consumers' rational thinking by stimulating their emotional interest.

The development of sensory branding plays a vital role in the process such as, colour, and smell which are major factors in the retail industry. Eateries using these sensory elements are welcoming factors including the sound, touch and taste. The emerging concept of QSR is highly attached with sensory marketing throughout their franchise stores. Thus, the study



concludes that consumer psychology consists of their behaviour and their senses therefore, consumer psychology in retail format is described, “the person, who react or accept or reject the situation, if they pointed out by any sensations”. While, sensory marketing is that, “consumer should purchase beyond the service by experience of excitement, refreshing mind or affair with store through any of five senses”. These are the two statements which help to develop the problem model as cohesion of consumer psychology with sensory marketing. Meanwhile, the conceptual model is based on Donovan and Rossiter (1982) study which introduced the Mehrabian and Russell (1974) environmental psychology model into the store ambience which is based on the *stimulus-organism-response* paradigm; it suggests that the effect of store environment factors on approach or avoidance behaviour is mediated by consumers’ sense affecting responses. The following *Figure 1.1* explains the conceptual model for research problem.

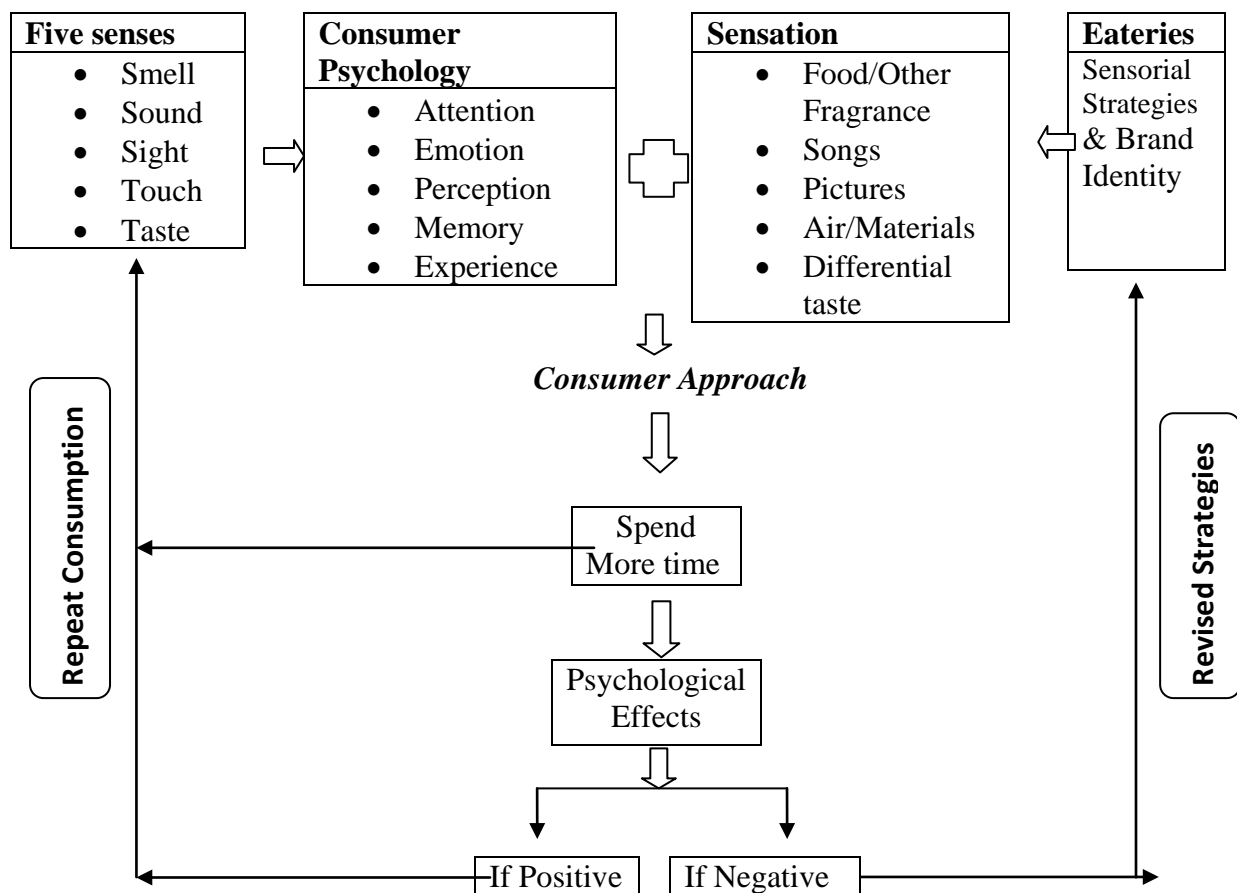


Figure 1.1 Proposed model for Consumer Psychology with Sensory Marketing



9. CANONICAL CORRELATION ANALYSIS

The analysis can be viewed as a logical extension of multiple regression analysis. The objective is to correlate simultaneously several metric dependent variables and several metric independent variables. The canonical weights (coefficients) $a_1, a_2, a_3, \dots, a_p$ are applied to the p X variables and $b_1, b_2, b_3, \dots, b_m$ are applied to the m Y variables in such a way that the correlation between CV_{X1} and CV_{Y1} is maximized.

$$CV_{X1} = a_1X_1 + a_2X_2 + \dots + a_pX_p$$

$$CV_{Y1} = b_1Y_1 + b_2Y_2 + \dots + b_mY_m$$

The CV_{X1} and CV_{Y1} are the first canonical variates, and their correlation is the sample canonical correlation coefficient for the first pair of canonical variates. An important advantage of multivariate techniques such as canonical correlation analysis is used in psychological research, in which human behavior research typically investigates variables that possibly have multiple causes and multiple effects. For this purpose, this study needs to analyze the changes of consumers' psychological effects towards their spending more time within the eatery.

9.1. Spending more time factors with consumer psychological effects

The sensory marketing deals with consumers' sensitivity related to their psychology to stimulate on them the purchase intentions. For the study, it is very essential to know that consumers are really influenced by sensory elements in the eatery shop and further it will be converted to any other psychological effects because, those effects will be noticed by us as the outcome of sensory marketing strategies through consumers' turnover rate. So, the primary factors used are canonical correlation analysis to identify the influences between the metric variables such as spending more time factors and consumers' psychological effects during or after the service. The primary sense of *sight* and *taste* are analyzed and on *predictor* of sight (spending more time factors) to check with *criterion* of sight (psychological effects) and the same is done for sense of taste also. The independent variables of spending more time factors are performed with 10 statements of both senses; and the dependent variables of psychological effects are also dealt with same. For this purpose, null hypothesis are framed followed by variables,

H₀₁: Spending more time factors has no influence with consumer psychological effects

H_{01a}: Sight; H_{01b}: Taste



Spending more time:

Sight

1. Store layout makes me feel, I am in the right place to spend my time (layout)
2. Colours of floor and wall make my time pleasant (colours)
3. Lightings/Paintings/decorators create happy mood in me (enjoy)
4. Design/Theme makes, a new environment for me (environment)
5. Employees dressing makes easy conversations with them (conversation)

Taste

1. Taste is the reason to take more quantity of food and enjoy in eating (quantity)
2. It creates more hunger (more hunger)
3. I wish my companion to take more items (refer)
4. Taste is reason to order variety of items (variety)
5. It does not take all my consumption time (not take)

Psychological effects:

Sight

1. Colours motivate me to work better (motivates)
2. Store designs help to relieve my stress/hang (hang)
3. Paintings make me think positively (positive)
4. Colours gives me good mood for full day (good mood)
5. Pictures/Visuals stimulate me to remember my life's happiness (happiness)

Taste

1. Taste takes long conservation even after consumption (long)
2. I feel healthy I consumed (healthy)
3. I repeat the same food every time visiting the store (repeat)
4. Sometimes I will prepare/push the same dish in my home (prepare)
5. Wherever I go, I will remember it, and I am eager to eat it (remember)

Canonical correlation analysis (CCA) of Sight:

This table includes an abbreviated SPSS output for the CCA, for the sake of shortness, elements of the original output that are not specifically salient to interpret the CCA are deleted, such as univariate results for each dependent variable.



Table 1.2 Multivariate Tests of Significance on Sight

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.667	18.293	25.00	2970.00	.000
Hotellings	1.039	24.454	25.00	2942.00	.000
Wilks	.440	21.664	25.00	2193.25	.000
Roys	.438				

Source: Primary data

Note: Statistical significance tests for the full model effect. Within cells regression Multivariate Tests of Significance (S = 5, M = -1/2, N = 294)

Table 1.3 Canonical Correlation Analysis on Sight

Root No.	Eigenvalue	Pct.(%)	Cum. Pct.	Canon Cor.	Sq. Cor
1	.780	75.10	75.10	.662	.438
2	.175	16.91	92.01	.386	.149
3	.052	5.10	97.11	.224	.050
4	.029	2.87	99.98	.169	.028
5	.000	.02	100.00	.015	.000

Source: Primary data

Note: Canonical correlations for each function separately Eigen values and Canonical Correlations

Table 1.4 Dimension Reduction Analysis on Sight

Roots	Wilks L.	F	Hypoth. DF	Error DF	Sig. of F
1 to 5	.440	21.664	25.00	2193.25	.000
2 to 5	.784	9.345	16.00	1806.17	.000
3 to 5	.922	5.427	9.00	1440.92	.000
4 to 5	.970	4.411	4.00	1186.00	.002
5 to 5	.999	.145	1.00	594.00	.703

Source: Primary data

Note: Hierarchal statistical significance tests in which only the last canonical function is tested separately Dimension Reduction Analysis

Table 1.5 Canonical Solution for Spending time predicting Psychological effects for Functions 1 and 2 (Sight)

Variable	Function 1			Function 2			h ² (%)
	Coef	r _s	r _s ² (%)	Coef	r _s	r _s ² (%)	
Motivates	0.632	0.816	66.5	-0.803	-0.377	14.2	80.7
Hang	-0.075	0.679	46.1	1.041	0.528	27.8	73.9
Positive	0.636	0.819	67.0	0.179	0.426	18.1	85.1
Good mood	-0.025	0.500	25.1	-0.384	-0.183	3.3	28.4
Happiness	0.050	0.510	26.0	-0.013	0.052	0.3	26.3
R _c ²			43.8			14.9	



Layout	0.178	0.665	44.2	-0.226	-0.176	3.1	47.3
Colors	0.435	0.825	68.0	1.163	0.100	1.0	69.0
Enjoy	-0.092	0.715	51.1	-1.517	-0.561	31.4	82.5
Environment	0.528	0.850	72.2	.403	-0.059	0.3	72.5
Conversation	0.229	0.600	36.0	-0.112	-0.139	1.9	37.9

Source: Primary data

Note: Structure coefficients (r_s) greater than (.50) are **bold**. Communality coefficients (h^2) greater than 50% are **bold**. Coef = standardized canonical function coefficient; r_s = structure coefficient; r_s^2 = squared structure coefficient; h^2 = communality coefficient

Results:

A canonical correlation analysis is conducted using the five *spending more time* variables as predictors of the five *psychological effects* variables to evaluate the multivariate shared relationship between the two variable sets. The analysis yielded five functions with *squared canonical correlations* (R_c^2) of 0.48, 0.14, 0.05, 0.02 and 0.0002 for each successive function. Together, the full model across all functions is statistically significant using the *Wilks's* $\lambda = .44$ criterion, $F_{(25, 2913.25)} = 21.66$, $p < .001$. Because, this test (*Wilks's* λ) represents the variance unexplained by the model, $1 - \lambda$ yields the full model effect size in an r^2 metric. Thus, for the set of five canonical functions, the r^2 type effect size is 0.56 ($1 - \lambda$), which indicates that the full model explains a substantial portion, about 56%, of the variance shared between the variable sets. The dimension reduction analysis takes the hierarchal arrangement of functions for statistical significance. As noted, above the full model (Functions 1 to 5) is statistically significant, $F_{(25, 2193.25)} = 21.66$, $p = 0.000$, while functions 2 to 5, 3 to 5, are also statistically significant, $F_{(16, 1806.17)} = 9.34$, $p < .001$, and $F_{(9, 1440.92)} = 5.42$, $p < .001$, respectively. Function 4 and 5 do not explain a statistically significant amount of shared variance between the variable sets, $F_{(4, 1186)} = 4.41$, $p = 0.002$ and $F_{(1, 594)} = 0.14$, $p = 0.703$, respectively. Given the effects for each function, only the first two functions are considered noteworthy in the context of this study (43.8% and 15% of shared variance, respectively). The last three functions only explain 5%, 2.9% and .02%, respectively, of the remaining variance in the variable sets after the extraction of the prior functions.

The *Table 1.5* presents the standardized canonical function coefficients and structure coefficients for *Functions 1 and 2* (two are adequate). The squared structure coefficients are also given as well as the communalities (h^2) across the two functions for each variable. For emphasis, structure coefficients above 0.50 by looking at the *Function 1* coefficients, one



sees that relevant criterion variables are primarily *positive*, *motivates*, *where*, *hang* and *happiness* making secondary contributions to the synthetic criterion variable. This conclusion is supported by the squared structure coefficients. These *effects* also tend to have the larger canonical function coefficients. A slight exception involves the *positive* and *motivates* the psychological effects, which have modest function coefficients but large structure coefficients. This result is due to the multi-collinearity that these two variables have with the other criterion variables.

Furthermore, all of these variables' structure coefficients have the same sign, indicating that they are all positively related. Regarding the *predictor* variable set in *Function 1*, *environment*, *colours* and *enjoy* variables are the primary contributors to the predictor synthetic variable, with a secondary contribution by *layout* and *conversation* because all the variables of structure coefficients are positively related to all of the *psychological effects*. These results are generally supportive of the theoretically expected relationships between spending time factors and their effects. On other hand, *Function 2*, the only criterion variables of relevance were *hang*, even though less so for the latter. As predictor, *enjoy* is the dominant predictor, looking at the structure coefficients for negatively related to *hang*. Hence, (H_{01a}) null hypothesis is rejected in terms of full model tested ($F_{(25, 2913.25)} = 21.66, p < .001$) and through standardized canonical function coefficients and structure coefficients, which are all predictors positively related to all criterion.

Canonical correlation analysis (CCA) of Taste:

These tables include an abbreviated SPSS output for the CCA of sense of *Taste* for the importance, the elements of the original output that are not specifically salient to interpret the CCA are deleted, such as univariate results for each dependent variable.

Table 1.6 Multivariate Tests of Significance on Taste

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.525	13.943	25.00	2970.00	.000
Hotellings	.725	17.072	25.00	2942.00	.000
Wilks	.542	15.717	25.00	2193.25	.000
Roys	.345				

Source: Primary data

Note: Statistical significance tests for the full model effect. Within cells regression Multivariate Tests of Significance (S = 5, M = -1/2, N = 294)



Table 1.7 Canonical Correlation Analysis on Taste

Root No.	Eigenvalue	Pct.(%)	Cum. Pct.	Canon Cor.	Sq. Cor
1	.527	72.65	72.65	.587	.345
2	.131	18.14	90.79	.341	.116
3	.055	7.59	98.38	.228	.052
4	.009	1.28	99.66	.095	.009
5	.002	.34	100.00	.049	.002

Source: Primary data

Note: Canonical correlations for each function separately Eigen values and Canonical Correlations

Table 1.8 Dimension Reduction Analysis on Taste

Roots	Wilks L.	F	Hypoth. DF	Error DF	Sig. of F
1 to 5	.542	15.717	25.00	2193.25	.000
2 to 5	.827	7.198	16.00	1806.17	.000
3 to 5	.936	4.349	9.00	1440.92	.000
4 to 5	.988	1.733	4.00	1186.00	.140
5 to 5	.997	1.476	1.00	594.00	.225

Source: Primary data

Note: Hierarchal statistical significance tests in which only the last canonical function is tested separately Dimension Reduction Analysis

Table 1.9 Canonical Solution for Spending time predicting Psychological for Functions 1 and 2 (Taste)

Variable	Function 1			Function 2			$h^2(\%)$
	Coef	r_s	$r_s^2(\%)$	Coef	r_s	$r_s^2(\%)$	
Long	0.733	0.921	84.8	0.606	0.229	5.2	90.1
Healthy	0.179	0.671	45.0	-0.292	-0.169	2.8	47.8
Repeat	-0.037	0.251	6.3	-0.819	-0.607	36.8	43.1
Prepare	-0.233	0.124	1.5	0.674	0.350	12.2	13.7
Remember	0.364	0.665	44.2	-0.360	-0.215	4.6	48.8
R_c^2			43.8			14.9	
Quantity	0.735	0.931	86.6	-0.865	-0.089	0.7	87.3
More hunger	0.043	0.693	48.0	0.568	0.412	16.9	64.9
Refer	-0.089	0.492	24.2	-0.210	0.216	4.6	28.8
Variety	0.354	0.766	58.6	0.837	0.546	29.8	88.4
Not take	0.241	0.239	5.7	-0.527	-0.521	27.1	32.8

Source: Primary data



Note: Structure coefficients (r_s) greater than (.50) are **bold**. Communality coefficients (h^2) greater than 50% are **bold**. Coef = standardized canonical function coefficient; r_s = structure coefficient; r_s^2 = squared structure coefficient; h^2 = communality coefficient

Results:

This correlation analysis is conducted using the sense of *taste*, to evaluate the multivariate shared relationship between the two variable sets of *spending more time* variables and *psychological effects* variables. The *squared canonical correlations* (R_c^2) of 0.34, 0.11, 0.05, .009, and 0.002 for each successive function and full model across all functions is statistically significant using the *Wilks's* $\lambda = .54$ criterion, $F_{(25, 2913.25)} = 15.71$, $p < .001$. So, *Wilks's* λ represents the variance unexplained by the model, $1 - \lambda$ yields the full model effect size in an r^2 metric. Thus, the r^2 type effect size is 0.46, which indicates that the full model is about 46%, of the variance shared between the variable sets. The dimension reduction analysis, the full model *Functions 1 to 5* is statistically significant, $F_{(25, 2193.25)} = 15.71$, $p = 0.000$, while functions 2 to 5, 3 to 5, were also statistically significant, *Function 4 and 5* are not statistically significant amount of shared variance between the variable sets, $F_{(4, 1186)} = 1.73$, $p = 0.140$ and $F_{(1, 594)} = 1.47$, $p = 0.225$, respectively. Hence, only the first two functions are considered noteworthy in the context of this study such 34.5% and 11.6% of shared variance. The last three functions only explain 5%, 0.9% and 0.2%, respectively.

The *Table 1.9* presents, *Functions 1 and 2* of standardized canonical function coefficients and structure coefficients. For given weight, consider the structure coefficients that should be above 0.50 and to take *Function 1* coefficients, the criterion variables are primarily *long* and secondary contributions are *healthy* and *remember*. These, *taste effects* also tend to have the larger canonical function coefficients. At the same time, slight exceptions are involved in the *healthy* and *remember* of psychological effects, which have modest function coefficients. This result is due to the multi-collinearity that these two variables have with the other criterion variables. In addition, all of these variables' structure coefficients have the same sign and are positively related to all variables. While, considering the *predictor* variable set in *Function 1*, *quantity* are performed as primary contributor to the predictor synthetic variable, and secondary contributions by *more hunger* and *variety* because, all the *spending more time* variables of structure coefficients are positively related to all of the *psychological effects*. In *Function 2*, the coefficients only criterion variables of relevance are



repeat, even though less so for the latter. As for predictors, *variety* is a dominant variable, along with *not take*. These predictor variables are also inversely related. While, looking at the structure coefficients for the entire function, *variety* is negatively related to *repeat* and *not take* variable have the opposite pattern. Hence, (H_{01b}) null hypothesis is rejected in terms of full model tested ($F_{(25, 2913.25)} = 15.71, p < .001$) and through standardized canonical function coefficients and structure coefficients, that are all taste of spending more time variables positively related with all psychological effects.

10. DISCUSSION OF FINDINGS AND SUGGESTIONS

Sight: Commonly, consumers are attracted by the sense of *sight* in any format like pictures, colours, décor, symbols, and slogan. Today, the eateries welcome the consumers through initial factors of sight; colours of floor/wall make more consumption time among the respondents. It creates a *happy mood, humble with companion, new environment* sights and insists on feeling better place than others. Further, employees dressing also can help for good conservation with them. Together, the sight and sense are statistically significant using the Wilks's $\lambda = .44$ criterion, $F_{(25, 2913.25)} = 21.66, p < .001$. Hence, canonical functions r^2 type effect size is 0.56 ($1 - \lambda$), which indicates about 56%, of the variance between the variable of spend more time and their psychological effects.

Taste: It is a key factor among the sensory elements in eatery shop for after the sense of *smell*. Consumers always think that where the *taste* is good, they do not mind whether is branded shop or not. As discussed earlier, some of consumers think that branded stores alone can deliver good taste and even some perceive the price will be decided by the taste. It is a very crucial situation to measure the *consumer psychology* through sense of taste. The survey says that, taste is reason for taking *more quantity* of items with created *hunger*. They also *refer/compel* their companion to take more items if taste is good. The *squared canonical correlations* (R_c^2) of 0.34, 0.11, 0.05, .009, and 0.002 for each successive function with the Wilks's $\lambda = .54$ criterion of full model statistically significant, $F_{(25, 2913.25)} = 15.71, p < .001$. Thus, r^2 type effect size is 0.46, which indicates 46% variance between the variables of spending more time with psychological effects.

10.1 Suggestions

- The sense of sight variables has impact with consumers' spending time within eatery, it increases their eating out, and it gives excitement. Eateries using various colours,



pictures, posters in the store environment but, there is equal respondents are placed in the stage of neutral whether sight stimulate more time of spending within eatery. Hence, eateries should utilize the seasonal colours; pictures at the year moments, social impact posters, and variety of segments instead of usual entertain variables. It gives some different experiences to consumers and retaining them by the way of psychological effects.

- Taste is the core component of eateries, there is no negotiation on it; and it gives new consumers to the business. Taste only differentiates from the competitors, made branding and uniqueness of business. Consequently, quick service eateries are mostly provided the western food items, which attracted the young population but not at all the post adults. Eateries should provide regional/traditional food by new format and insist to them healthy food with new taste; proud to be with traditional food habits. Because, post adults are earner/breadwinner of their family and causes of family dining. Peoples are back to organic food items and they refuse quick items at gradually. Therefore, eateries should consider the traditional taste and variety of food items with new format.

11. CONCLUSION

Eating out is emerging market on today; consumers are not only visit the eatery for eating purpose, they celebrate their time, entertain, and many other reasons. Eateries adopt many strategies to acquire and retain their consumers; by the way, combined sensory marketing is used to retain them. The sense appeal does positive impact with consumers than other tools. With evidence of above analysis, the consumer psychology as highly correlated with sensory marketing. If providing a proper sensory, it can produce good amount of results. According to the study, the sense of sight and taste has played an important role in the eatery business, and leads other senses too.

REFERENCES

1. Associated Chambers of Commerce & Industry of India (ASSOCHAM)
2. Eating out, A bite of F&B Food service in India, *Enterprise Consulting, Athena Infonomics, Chennai*
3. D'Essence Hospitality Advisory Services Pvt Ltd, Mumbai



4. Donovan, R.J., Rossiter, J.R., 1982. Store atmosphere: an environmental psychology approach. *J. Retail.* 58 (1), 34–57.
5. Howes, D. (ed.) (2005) *Empire of the senses: the sensual culture reader*. BERG, UK.
6. Indian QSR Industry – Opportunities and Strategies to Harness Them, Piyush Kumar Sinha, Professor, Indian Institute of Management Ahmedabad, W.P. No. 2012-06-07, June 2012)
7. Krishna, A. (2010), *Sensory Marketing: Research on the Sensuality of Products*, Routledge, New York.
8. Mehrabian, A., Russell, J.A., 1974. *Approach to Environmental Psychology*. The MIT Press, Cambridge, MA.