CONSUMER PERCEPTION FOR PASSENGER CARS IN ODISHA: IN RELATION TO GENDER AND OCCUPATION

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ABSTRACT

Passenger cars once the luxury is now the need and the people from both the genders are in to it. The purchase decision of a passenger car is a decision made by both male and females in recent years. Out of many other factors, one of the major factors is the occupation i.e. service, business, agriculture, professional or manufacturing in specific to the gender. Hence, this research is intended to to understand the psychological difference between the male and female for the occupation. This research tries to find out what is the effect of gender in relation to the occupation for a purchase decision of a passenger car.. The questionnaires used are pre and post tested with a sample size of 50 car owners. With a valid for mat of questionnaire we made the final questionnaire for the final collection of data. This is an empirical study made in major 10 districts of Odisha, with a sample size of 450 passenger car owners Out of these there are 424 valid responses we got. To analyze the same we took the help of statistical tool SPSS 19 version. this paper concludes that there are significant difference between the buying habit of a passenger car in relation to profession for the purchase of a passenger car.

Key words: SPSS, Empirical study, Passenger cars,

1. INTRODUCTION

Since 1898, the passenger cars on road the industry have traveled a mile stone of the 3rd largest market in the globe, in the most promising market for the many global promoters. The society once up on male dominated is not equally occupied by females too. Due the equal opportunities for the females in every segment of employability, it's no more a man centric market rather it is open to both the genders.

2. MOTIVATION FOR THE STUDY:

The researcher is interested in this analysis, as the findings of this may assist the manufacturers and the promoters to understand the psychology of buyers in specific to a gender. The market positioning as per gender is a tradition and full proofed plan that every industry follows. To know about if there any such preferences regarding the payment mode in specific to a gender enables them to facilitate the desired to make the sales effective.

3. LITERATURE REVIEW:

Mahapatra & Kumar, (2010) on an empirical study on the customer satisfaction, dissatisfaction and post purchase evaluation, used thirty two attributes to understand the customer preferences. They concluded that the performance of the product in terms of pollution, ignition, battery performance and pickup are highly influencing the consumers' future purchase decision. the attribute he used are maintenance cost, fuel efficiency, comfortless, brake safety,

vibration, pollution/emission, engine sound, ignition, battery performance, horn, wiper performance, pickup and light. But he has not used gender as a parameter of satisfaction also the occupation.

Menon, B. (2012). On this article on the parameters and framework development to study consumer behaviour patters of passenger cars, revealed that almost all the automobile companies proposes the similar type of value propositions. Among all these, whether the engine capacity is a factor to influence the buying habit of a customer. He found that this engine capacity is not an important criteria rather some other factors. These are Consumer Behaviour Patterns, Customer Loyalty, External Influence, Brand Community, Family Influence, Customer Satisfaction etc.

Storchmann, K. (2005)in his article on: Long-Run Gasoline demand for passenger cars the role of income distribution, revealed that the impact of the unequal income distribution among the developed and developing countries varies the behaviour for purchase of the durable goods. He reveled that there is heigh level of disparity between the purchase behaviour as per the income levels for the purchase of the passenger cars. This paper also revealed that with a distribution of the income leads to considerable decrease in the income elasticity value.

Srivastava, A., & Matta, M. (2014)an article on Consumer behavior towards passenger cars: A study in Delhi NCR, did a detailed behavioral study on the consumer satisfaction for a passenger car by the buyers. The major finding is that; the majority of the consumers are influenced by various factors, such as culture, family reference, age and life style while they go for a purchase of a passenger car.

4.   RESEARCH GAP:

With above research made exclusively of the buying habit of the passenger cars in India, none of the researchers have emphasized to establish any relationship between the gender and occupation. It here by emphasized that; the occupation could be five types, i.e. *service, business, agriculture, professional or manufacturing*

5.   OBJECTIVE OF THE STUDY:

Major objective:

The major objective the research is to find the relationship between the Gender and the occupation for purchase of a passenger car.

Specific objective:

The specific objectives are as follows;

To find, is there is any relation between gender that with Occupation

To find, is there is any relation between gender (Male) that with Occupation

To find, is there is any relation between gender (Female) that with Occupation

To find, is there is any relation between gender (male & female) that with Service holder

To find, is there is any relation between gender (male & female) that with Professional

To find, is there is any relation between gender (male & female) that with Business

To find, is there is any relation between gender (male & female) that with Agriculture

To find, is there is any relation between gender (male & female) that with Manufacturing

6.　FORMULATION OF HYPOTHESIS:

Ho_1: There is no significant difference between Gender and the occupation (all)

Ho_2: There is no significant difference between Gender (Male) and the occupation (all)

Ho_3: There is no significant difference between Gender (Female) and the occupation (all)

Ho_4: There is no significant difference between gender (male & female) that with Service holder

Ho_5: There is no significant difference between gender (male & female) that with Professional Ho_6: There is no significant difference between gender (male & female) that with Business man

Ho_7: There is no significant difference between gender (male & female) that with Agriculture

Ho_8: There is no significant difference between gender (male & female) that with Manufacturing

7.　RESEARCH METHODOLOGY

Sample Area: The sample collected from the 10 major districts of Odisha.

Sample Duration: The sample is collected between Jan 2019 to Jan 2020.

Sample Size: 450 samples are collected from the present passenger car owners out of which 424 are the valid responses we found. In terms of percentage it is 92.22% of the collected data.

Sampling Framework: the collected data was analyzed through the test of hypothesis and independent t-test to find the correlation between the gender and occupation on multiple dimensions.

Analysis procedure: The data was first done through a normality test followed by sampling adequacy and internal consistency. Further the same was tested on the basis of hypothesis designed to test the statistics.

Pre-test and post-test

A pre-test and post-test was conducted on 50 number of samples and the questionnaire initially design gone through the necessary changes. The final questionnaire was developed was sent for the collection of final data.

Statistical tools used: In this study, we took the help of SPSS-19 to analyze and validate our data.

8.　DATA ANALYSIS &INTREPRETAION:

ANALYSIS FOR GENGER (MALE & FEMALE)

DESCRIPTIVE STATISTICS:

The below table(1) reveals that there are total 424 valid responses and there are no missing data.

The table-1

Case Processing Summary			
		N	%
Cases	Valid	424	100.0
	Excluded[a]	0	.0
	Total	424	100.0
a. Listwise deletion based on all variables in the procedure.			

The Below table(2) reveals that out of 424 responses there are 278 male respondents and 146 female respondents, in percentile it is 65.6 and 34.4 respectively.

Table: 2

GENDER					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	278	65.6	65.6	65.6
	FEMALE	146	34.4	34.4	100.0
	Total	424	100.0	100.0	

DESCRIPTIVE STATISTICS FOR GENDER

Total no. of valid responses 424, No missing data, Mean 1.34 with standard error of mean 0.23, standard deviation 0.476, Mean and Median both are 1.
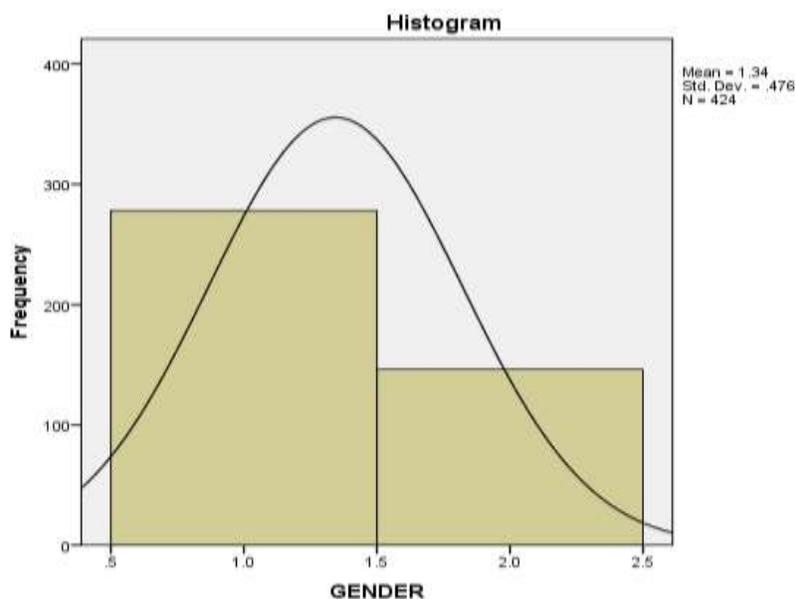
Table: 3.

Statistics		
GENDER		
N	Valid	424
	Missing	0
Mean		1.34
Std. Error of Mean		.023
Median		1.00
Mode		1
Std. Deviation		.476
Variance		.226
Skewness		.658
Std. Error of Skewness		.119
Kurtosis		-1.575
Std. Error of Kurtosis		.237
Sum		570

TEST OF NORMALITY

The test of normality refers to the distribution of the data follows a normal distribution or no? To know the same we evaluated the Z value of Kurtosis & Skewness, along with the test of outliers.

The Z value of Kurtosis and skewness remains outside of the valid range of + & - 1.96. Hence the data follows a non normal distribution. As presented in above table also in the histogram below.

Diagram: 1.

8.1. FOR OCCUPATIONS (5)

DESCRITPIVES

The below table reveals that, there are 424 valid responses out of which the respondents belongs to the specific

profession are as follows;

Service holders; 16,

Professionals; 152,

Business men; 54,

Agriculture; 25 and

Manufacturing; 32

There are no missing data in the given sample.

Table: 4.

Occupation		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	service	161	38.0	38.0	38.0
	professional	152	35.8	35.8	73.8
	business	54	12.7	12.7	86.6
	agriculture	25	5.9	5.9	92.5
	manufacturing	32	7.5	7.5	100.0
	Total	424	100.0	100.0	

DESCRIPTIVE STATISTICS

The below table reveals that, the mean of the distribution is 2.09, standard error .058, mode is 1and median is 2.

Table: 5

Statistics		
Occupation		
N	Valid	424
	Missing	0
Mean		2.09
Std. Error of Mean		.058
Median		2.00
Mode		1
Std. Deviation		1.190
Variance		1.417
Skewness		1.114
Std. Error of Skewness		.119
Kurtosis		.424
Std. Error of Kurtosis		.237
Sum		887

TEST OF NORMALITY

The test of normality refers to the distribution of the data follows a normal distribution or no? To know the same we evaluated the Z value of Kurtosis & Skewness, along with the test of outliers.

The Z value of Kurtosis and skewness remains outside of the valid range of + & - 1.96. Hence the data follows a non normal distribution. As presented in above table also in the histogram below.

Diagram2.
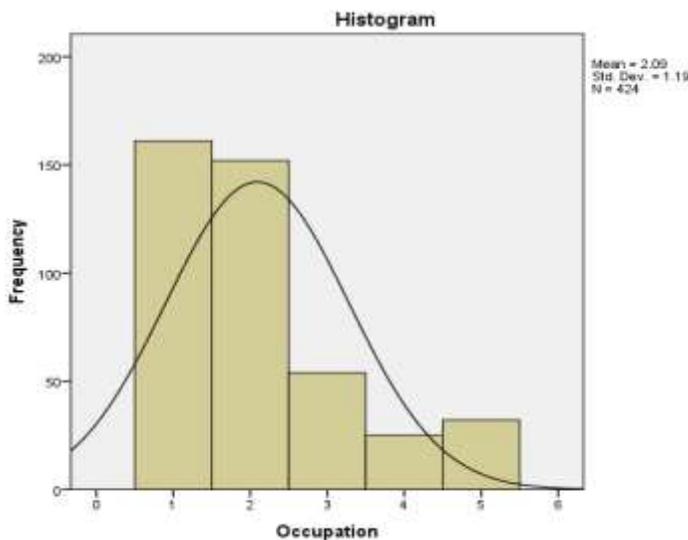
RELIABILITY STUDY:

The reliability study is evaluated with help of Cronbach's alpha, which the measure for the internal consistency of the data.. the value -.026 is very less to make that data reliable in term of the internal consistency of the data. Hence there is very low and negative correlation between the two variables, gender and the occupation.

Table: 6.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.026	.037	2

INTER- ITEM CORRELATION:

The inter-item correlation between the items Gender and the Occupation is .019, which says that there are very low degree and a negative correlation between the items i.e. 19%.

Table: 7.

Inter-Item Correlation Matrix		
	Occupation	GENDER
Occupation	1.000	.019
GENDER	.019	1.000

9.   TEST OF HYPTHESIS:

9.1. Hypothesis Number 05: (GENDER vs. OCCUPATION)

If there is any significant difference between gender and occupation, while a buyer goes for purchase of a passenger car?

With the help of correlation matrix P value at 95% level of significance is .000 which is less than that of the critical value .05.

Hence we will reject the null hypothesis, i.e. **there is a significant difference between gender and occupation for a passenger car.**

Table: 8.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories of Occupation occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
2	The categories defined by GENDER = MALE and FEMALE occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

9.2. Hypothesis Number 01: (GENDER MALE vs. OCCUPATION)

If there is any significant difference between genders (Male) and occupation, while a buyer goes for purchase of a passenger car?

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories of Occupation occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

With the help of correlation matrix P value at 95% level of significance is .000 which is less than that of the critical value .05.

Hence we reject the null hypothesis, and in alternate we accept the alternate Hypothesis, i.e. **there is a significant difference between gender (Male) and occupation (all) for purchase of a passenger car.**

9.3. Hypothesis Number 02: (GENDER FEMALE vs. OCCUPATION)

If there is any significant difference between genders (Female) and occupation, while a buyer goes for purchase of a passenger car?

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories of Occupation occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

With the help of correlation matrix P value at 95% level of significance is .000 which is less than that of the critical value .05.

Hence we reject the null hypothesis, and in alternate we accept the alternate Hypothesis, i.e. **there is a significant difference between gender (Female) and occupation (05) for purchase of a passenger car.**

9.4. Hypothesis Number 03: (OCCUPATION-SERVICE vs. GENDER)

If there is any significant difference between the occupations (service) that with the gender, while a buyer goes for purchase of a passenger car?

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by GENDER = MALE and FEMALE occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.018	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

With the help of correlation matrix P value at 95% level of significance is .05 which is less than that of the critical value .05.

Hence we reject the null hypothesis, and in alternate we accept the alternate Hypothesis, i.e. **there is a significant difference between** occupations (Service) that with the gender **(Male / Female) for purchase of a passenger car.**

9.5. Hypothesis Number 03: (OCCUPATION-PROFESSIONAL vs. GENDER)

If there is any significant difference between the occupations (professional) that with the gender, while a buyer goes for purchase of a passenger car?

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by GENDER = MALE and FEMALE occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

With the help of correlation matrix P value at 95% level of significance is .000 which is less than that of the critical value .05.

Hence we reject the null hypothesis, and in alternate we accept the alternate Hypothesis, i.e. **there is a significant difference between** occupations (Professional) that with the gender **(Male / Female) for purchase of a passenger car.**

9.6. Hypothesis Number 03: (OCCUPATION-BUSINESS vs. GENDER)

If there is any significant difference between the occupations (Business) that with the gender, while a buyer goes for purchase of a passenger car?

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by GENDER = MALE and FEMALE occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	1.000	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

With the help of correlation matrix P value at 95% level of significance is 1.000 which is less than that of the critical value .05.

Hence we accept the null hypothesis, i.e. **there is no significant difference between** occupations (Business) that with the gender **(Male / Female) for purchase of a passenger car.**

9.7. Hypothesis Number 03: (OCCUPATION-AGRICULTURE vs. GENDER)

If there is any significant difference between the occupation (agriculture) that with the gender, while a buyer goes for purchase of a passenger car?

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by GENDER = MALE and FEMALE occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.424[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1] Exact significance is displayed for this test.

With the help of correlation matrix P value at 95% level of significance is .424 which is greater than that of the critical value .05.

Hence we accept the null hypothesis, i.e. **there is no significant difference between** occupations (**Agriculture**) that with the gender **for purchase of a passenger car.**

9.8. Hypothesis Number 03: (OCCUPATION-MANUFACTURING vs. GENDER)

If there is any significant difference between the occupations (manufacturing) that with the gender, while a buyer goes for purchase of a passenger car?

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by GENDER = MALE and FEMALE occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.216	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

With the help of correlation matrix P value at 95% level of significance is .210 which is greater than that of the critical value .05.

Hence we accept the null hypothesis, i.e. **there is no significant difference between** occupation (manufacturing) that with the gender **for purchase of a passenger car.**

10. FINDINGS:

With the above analysis we found that there are significant difference between the gender and the occupation in gross, which means that there is no significant relation between gender and the occupation. . While in item to item correlation, we observed that, the genders male and female respondents differently for the selection of the occupations, i.e. business, agriculture, manufacturing, service and professional. Out of these, for the occupations; Business, agriculture and manufacturing there are significant no difference between the responses of the male and female towards the purchase of passenger car.. While the occupations like; service and professionals, there is a significant difference between the genders (male & female) while they go for purchase of a passenger car.

11. CONCLUSION

We could conclude from the above study that, the marketers or the manufacturers must give emphasis on the occupations a tool to convince the customers. There are no such straight or single strategy for both the genders and occupation. One shall plan accordingly gender along with mode specific strategy to make sale of the passenger cars.

12. SCOPE FOR FURTER RESEARCH

This research is open for further analysis on other dimensions, i.e. qualification, mode of payment etc.

There are also scopes to extend the same research in other states of country for a better and broad generalization of the outcomes.

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