

PERCEPTION OF WOMEN TRAVEL BEHAVIOR IN HOT TRAFFIC CITY: AN EMPIRICAL STUDY WITH REFERENCE TO CHENNAI

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Abstract

Nowadays women cannot afford to take longer work trips due to the nature of their physique and the need to allocate more time to their families and also the working age women make more trips but fewer miles and minutes than their male counterparts, they are expected to have an increasing impact on travel demand. While analyzing the travel frequency and travel time, the influence of car availability and degree of urbanization on travel behavior is identified. In the present scenario, the number of women license holders and the women who drive vehicles has tremendously increased over these years. This reveals that women either working or unemployed has a need to travel. This may be for traveling for work place, or travel on work, and personal travel. Especially in Chennai for the last ten years, the traffic problems have become very serious. Each and every individual has aversion for traveling by any mode of transport. Hence this study has been focused to analyze the women travel behavior in hot traffic city, the study has been adopted convenience sampling technique and the total sample size was framed 125 fitted for the final study, the results are discussed based on research design.

Keyword: Hot Traffic, Aversion, Urbanisation, Travel Demand, Behaviour and Physique

I. INTRODUCTION

Women consistently have shorter work trips than men, regardless of income, occupation, marital and family status, mode of travel or location and that women undertake more non-work trips than men. It has been proved from various studies that women cannot afford to take longer work trips due to the nature of their physique and the need to allocate more time to their families. Working age women make more trips but fewer miles and minutes than their male counterparts, they are expected to have an increasing impact on travel demand. As such, differences in female responses to travel demand management strategies are likely to become increasingly important as governments try to curtail travel demand in the future. It has been identified that, women and men should be modeled separately with respect to work trip mode choice. And there are three main differences that appear from the econometric models: women are less likely to choose public transit than men; women are more likely to choose to ride share; and women are less time sensitive when it comes to commuting than men are.

The travel behavior is isolated from other human activities, and analyzed separately. The alternative is to take the general activity pattern of individuals as the departure point, and to consider travel as a derived demand. While analyzing the travel frequency and travel time, the influence of car availability and degree of urbanisation on travel behaviour is identified. In the

present scenario, the number of women license holders and the women who drive vehicles has tremendously increased over these years. This reveals that women either working or unemployed has a need to travel. This may be for traveling for work place, or travel on work, and personal travel. This personal travel may include picking up of children from school, shopping, visiting places, to attend family functions or travel for personality development. Women being by nature safety conscious and with economical decision making skill prefer their own means of transport. Women have become more self sufficient and independent due to the fast moving world and family responsibilities are equally shared by women. This gives them independency to take decisions, and manage themselves in their own driving. The dual working system in the present families has way to increase in income levels that enabled them to increase their purchasing power. Thereby, countering the need of the families, they buy their own means of vehicles for travel. Even though this trend increases the traffic and other pollution problems, this enables a safe and comfortable journey.

Problem focus

In the modern days, almost all metro cities are highly equipped in terms of transportation, road infrastructure, vehicles etc. Especially in Chennai for the last ten years, the traffic problems have become very serious. Each and every individual has aversion for traveling by any mode of

transport. Even the travel in luxurious car is not exception. On the gender basis, women face more problems in traveling and choice for mode of transport. The ratio of Women who commute to different places for personal and official purpose is found to be 80%. In this 45% of women prefer to travel by car and two wheeler to avoid unnecessary tensions in traveling by choosing public transport mode, hence this study has been focused to analyse the women travel behaviour in hot traffic city .

Objectives

1. To analyze the travel behaviour of women in hot traffic city
2. To identify the factors associated with women preference for the usage of vehicle
3. To analyse the women travel behaviour with mode of transport and distance .

II. REVIEW OF LITERATURE:

Martin(1998)although women's participation in the labour force has been rising, men's and women's jobs are not equal. Women's jobs are more concentrated in retail and service jobs, that are often lower paid, and are spatially distributed in many locations close to residential areas. Because they are closer to home may be a significant factor in the decision to assign these responsibilities to the woman in two-worker house holds. And visa versa, the need to fulfill these responsibilities may affect women's decisions on choices of work and occupation. Our expectations of how family needs are to be met are also part of our social roles and expectations. These then directly affect the daily travel. These results support his assertion that "travel patterns are among the most clearly 'gendered' aspects of American life".

Ruth(1999) explains the main purposes of the qualitative research are perception of women in science and technology was to gain a better understanding of the experiences and perceptions for careers in science and technology. The broad topics covered in the discussions were career decisions and goals, work, workplace policies and culture, hiring and career development; and ideas or suggestions for encouraging women and girls to consider careers in science and technology fields and for creating more female-friendly work places.

Jeshi (2004)say that there was a time when only men drove cars. As for the women, they walked in daintily only to have someone opening the door and driving them to

their destinations. Today, all that has changed with women opting for a career and a life of their own, mobility has become paramount. A car is not just a means of transportation anymore. It reflects attitude, freedom and a very strong style statement.

Cerullo(2005) explains the trade secret to understand that more and more of the customers are going to be women, and they cannot be treated the same way as treating men. The marketer need to understand what all of the customers is looking for in an auto repair shop, then provide it. In his research he has found that some of his female customers are solely responsible for maintenance on their own vehicle with no man in the picture.

James lundy(2006) – Branding Vs Direct response shows how widely women with kids are using the internet when it comes to car purchasing. It also shows that maximum women with kids looked at one or more car companies website for information on car rather than insurance websites, search engine, specialist car- related websites or portals and very few have searched cars on car auction sites such as a e-bay. And the internet is key for getting price and feature comparisons when compared to car magazine, newspaper, any other magazine or Television.

III. METHODOLOGY

The objective of this study is to analyze the perception of women travel behavior in hot traffic Chennai. It required collection and analysis of both primary and secondary data. Secondary data are related to published information related to traveling behaviour of women in journals and articles. Primary data are related to the perception of women travel behavior and the usage of transport, distance and preference of transport in Chennai.

Pre-Test

A pilot study was conducted with an idea of testing the reliability of the questionnaire designed.25% of the population was considered for pretesting and based on the views of the respondents the needed modifications are carried out and the questionnaire was standardized.

Sampling Design

For the study convenience sampling technique was adopted. The total sample size was framed 150 .In this 125 fitted for the final study.

IV. RESULTS AND DISCUSSION

Table 1. Age wise respondent

S. No	Age Characteristics	No.of respondents	Percentage
1.	<=25	45	36
2.	26 – 45	51	40.8
3.	>45	29	23.2
Total		125	100

The above Table 1. exhibits the respondents based on age, from the 125 respondents maximum of 40.8% of respondents belong to the 26-45 age group ,36% of respondents belong to age group of 25 and below and a minimum of 23.2% of respondents belong to more than 45 age group. It is evident from the above table 26 -45 years age categorize respondents have preference for usage of vehicle in hot traffic city.

Table 2. E Mode of transport preference for journey within 1 km.

S. No	Mode of transport	No. of respondents	Percentage
1	Walk	56	44.8
2	Cycle	10	8
3	Two Wheeler	38	30.4
4	Public mode	21	16.8
Total		125	100

The above Table 2. exhibits the respondents preference for journey within 1 Km. From the 125 respondents maximum of 44.8% of women prefer to walk for journey within 1 Km,30.4% prefer two wheeler,16.8% prefer public mode and a minimum of 8% of women prefer to travel by cycle for the journey within 1 Km.

Table 3. Mode of transport preference for journey within 5 to 20 Km

S. No.	Mode of transport	No. of Respondents	Percentage
1.	Two Wheeler	36	28.8
2..	Bus	44	35.2
3.	Auto	11	8.8
4.	Train	12	9.6
5.	Car	22	17.6
Total		125	100

The above Table 3. exhibits the respondents transport preference for journey within 5 to 20 Km .From the 125 respondents shows that a maximum of 35.2% of women prefer Bus, 28.8% of women prefer two wheeler,17.6 % prefer car,9.6% prefer train, and a minimum of 8.8% of women prefer Auto for journey within 5 to 20 Km from residence.

Table 4. Mode of transport preference for long journey

S. No.	Mode of transport	No. of Respondents	Percentage
1.	Train	75	60
2..	Bus	24	19.2
3..	Car	26	20.8
Total		125	100

The above Table 4. exhibits the respondents ,transport preference for long journey. From the 125 respondents,60% women prefer train,20.8% prefer car and 19.2% prefer bus for long journey:

Table 5. Chi-Square test for association between age group and mode of transportation.

H_0 =There is no association between Age group and mode of transportation.

Age group	Two Wheeler	Four Wheeler	Cycle	None	Row Total
<=25	27 (60)	8 (17.8)	7 (15.6)	3 (6.7)	45 (36)
26-45	26 (51)	9 (17.6)	1 (2)	15 (29.4)	51 (40.8)
>45	13 (44.8)	4 (13.8)	-	12 (41.4)	29 (23.2)
Column Total	66 (52.8)	21 (16.8)	8 (6.4)	30 (24)	125 (100)

Chi-Square Value = 20.25196 DF = 6

Significance (P Value) = 0.00250

In order to analyse the association between age group and mostly used transport, chi-square test was applied. It is inferred that the P Value(0.00250) is less than table value(0.01).Hence there is association between Age group and mostly used transport, it is evident from the above table that the respondents who are <=25 age group a maximum of 60% of 45 respondents use two-wheeler mostly and respondents in 26-45 age group was identified

that a maximum of 51% of 51 respondents travel by two-wheeler, and respondents of >45 age group the number has still reduced to 44.8% of 29 respondents travel by two-wheeler.

Table 6. Friedman test for significant difference between mean rank towards usage of transport

H₀ =There is no significant relationship between mean rank and mode of transport

S. No.	Variable	Mean Rank	Rank
1	Convenience	3.00	1
2	Expensive	6.49	7
3	Need Not Depend on others	4.77	3
4	Time sensitive	5.17	4
5	Safety	4.17	2
6	Easy Parking	5.50	5
7	More confident driving	6.52	8
8	No. of travelling members	5.71	6
9	Working condition	6.71	9
10	License	6.97	10

Chi- Square value = 158.2.5 P Value = 0.000

The above Table 6. shows the various factors associated with women travel behavior in hot traffic city .The Friedman test was applied to find out the significant difference between mean rank towards usage of transport. It was identified ,the respondents are more preferred to usage of transport by own vehicle are grouped to three factors. The first level factors are convenience, safety and independency and the second level priority was given to the factors time sensitive, easy parking and more no of travelers.

The third factor indicates the least priority such as expense, lack of confidence in driving, working conditions, getting license .Women prefer the vehicle they travel than other modes of transport mainly due to convenience and secondly due to safety. Since P value is less than 0.01, there is significant relationship between Mean Rank towards mode of transport often used at 1% level.

In order to find out the significance between occupation and mode of transport, chi-square test was applied, Since P value is less than (0.01)table value of 20.77179 there is significant relationship between occupation and mode of transport used mostly at 1% level.

Table 7. Chi-Square test of significance between occupation and mode of transport

H₀ =There is no significant relationship between occupation and mode of transport

Occupation	2-Wheeler	4-Wheeler	Cycle	Public transport	Row total
Employed	18 (48.6)	8 (21.6)	3 (8.1)	8 (21.6)	37 (29.6)
Student	17 (56.7)	7 (23.3)	5 (16.7)	1 (3.3)	30 (24.0)
Home maker	31 (53.4)	6 (10.3)	-	21 (36.2)	58 (46.4)
Column Total	66 (52.8)	21 (16.8)	8 (6.4)	30 (24.0)	125 (100)

Chi-Square value – 20.77179 P Value – 0.00202

The above Table 7. reveals out of 125 respondents,66 respondents of women use two wheeler ,in this 17 respondents belong to student and 18 respondents are office goers and majority of the respondents(31) are homemakers who use two wheelers. Regarding four wheelers ,from the 21 respondents, 8 ,7,6 respectively office goers, students, homemakers. With respect to cycle and public transportations, the cycle respondents are found to be very less(8) and preference for public transportation is 30.In this homemakers gave preference for public transport due to age factor and fear towards driving in hot traffic.

V. CONCLUSION

The basis for travel pattern of women in Chennai shows the general travel behaviour of women, the empowerment of women in their travel behaviour, their independency in travel, their driving patterns and their view of driving comforts, their access to public transportation. In these last years of the millennium, suffice it is to say that "Women buy just as many cars as men, but have the power of veto in about 80% of cases. The shift away from traditional large family cars and station wagons to SUVs is a testament to this. Women are looking for the safety and functionality that SUVs offer in a more contemporary design. It was identified that 34.4% of women lack confidence in driving vehicle even though they have license. They need to come out of their mind blocks for independent and better living. It is clearly evident from the study that 14.4% of respondents have the plans to switch-over from two-wheeler to car.

Women's equality in power sharing and active participation in decision making, including decision

making in political process at all levels will be ensured for the achievement of the goals of empowerment. All measures will be taken to guarantee women equal access to and full participation in decision making bodies at every level, including the legislative, executive, judicial, corporate, statutory bodies, as also the advisory Commissions, Committees, Boards, Trusts etc. Affirmative action such as reservations/quotas, including in higher legislative bodies, will be considered whenever necessary on a time bound basis. Women-friendly personnel policies will also be drawn up to encourage women to participate effectively in the developmental process.

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