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## ***Parental Behavior towards Children Travelling To School: A Study in Bahadurgarh City***

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### ***Abstract***

*Research suggests that, physical and environmental dimensions, the behavior and perceptions of parents played important role in deciding their children's mode choice to school. The current study intends to research above uninvestigated area of study and identify the influences on parental attitudes towards their children travel to school. Through the use of a questionnaire, response is carried out with the help of survey forms, in these survey forms some question were asked also they have to rate the weightage to the factors such as distance to school, transportation facility, safety-road, safety-strangers danger, pedestrian facility, fee structure of school and some other factors which can be responsible for deciding them to choose mode for their children, with the help of these questions it was easy to explore the factors affecting travel pattern of school children from the parents point of view also, up to what extent parents are concerned about their child's safety. The current study analyses some of the above factors which they thought to be responsible to decide whether their children are dependent on parents or not i.e. whether children travel with their parents or alone, based on data drawn from the Bahadurgarh city of Haryana state Survey of parents of more than 8 school pupil parents were surveyed.*

***Keywords:*** *Safety; Pedestrian; Transportation; Survey*

## 1. INTRODUCTION

The trips of children to school are different from other trips. It is therefore likely that the factors affecting these trips will also be different. The areas in which the trips of school pupils to school differ from most other trips include the following

- Decisions regarding children's travel are often made by adults;
- Children often rely on adults to provide travel, or to accompany them;

### *1.1. Factors Influencing Travel Choices*

Six main factors identified which affects the mode choice for school travel [1] identified:

1. Distance to school.
2. Transportation facility.
3. Safety-stranger danger.
4. Safety-road safety.
5. Cost.
6. Pedestrian facility.

Status as a contributing factor is also identified [2] in travel choices. Cars are generally appears to be as a higher status than other modes such as Public Transport or walking and cycling. Insofar as children

are often taken to school as part as an adult's trip somewhere else, their findings are likely to be applicable to many school trips. However, it may be that children prefer more independent modes, and it is therefore possible that children give travelling independently a higher status than travelling with parents.

Families may therefore be more ready to change travel habits at times of change, such as moving house or changing jobs [3].The factors such as Road Safety, Distance to travel, transportation facility, fee structure or cost of school, stranger's danger, road safety etc. directly or indirectly influence travel behavior.

## 2. OBJECTIVE OF THE STUDY

Main objective is to find out relationship between the factors influencing travel pattern of school pupil in parents view and other attributes. Identifying the factors affecting decision-making regarding travel behavior can help for future planning and to find better alternatives for school pupils travel pattern [4]. In this study two questions rose, namely: Independence in travelling behavior of children to school and what are the factors which are

responsible for affecting parents' behavior towards their children travel to school.

### 3. CASE STUDY AREA

The case studies were selected from Bahadurgarh city of Haryana. Bahadurgarh is located at 28.68°N 76.92°E and covers an area of approximately 50 km<sup>2</sup>. It is Part of National Capital Region and very close to Capital of India. It is located to the west of Delhi on the National Highway Number 10. Different schools located in different regions.

### 4. METHODOLOGY

#### *Parents' Surveys*

Parents were asked to complete the survey forms during parents and teacher interaction at the end of the month with the help of school teachers. The objectives of the parents' surveys were to identify the independence in travel pattern of children to school, and to identify the importance of number of factors which may influence school travel choices. As a general principle, it was considered preferable to get a large number of responses from a wide variety of parents rather than very detailed information from a smaller number of parents.

The survey forms were therefore designed to be easily understood by a wide cross section of society, and to be quick and easy to complete. The survey forms were kept as simple and straightforward as possible. The use of technical terms was minimized and the language kept simple type questions, which only required the ticking of appropriate boxes, were asked.

The information sought from parents included:

- The number of primary age children in their home and ages of those attending the school being surveyed;
- The number of cars in the home;
- The children's trips with adults or alone; and
- The importance they placed on a number of factors which may influence children's travel choices.

Data was obtained from the parents of 8 schools' children. Almost 1000 survey forms were distributed and more than 800

forms were returned i.e. response rate was almost 80% which was really good.

***School surveys***

In these surveys various schools were identified and selected for conducting neighborhood survey such as pedestrian facility provided out of these schools and also the transportation facility of the schools. Pedestrian facility was analyzed for every school from the pedestrian criteria proposed by [5].

***Response of parents’ survey***

Prior to carrying out the survey, school principals spoken to that based on

responses to previous surveys, they would expect a response rate of between 50 to 60% of parents surveyed but overall 80 % of the total number of parents surveyed responded. This suggests a high level of interest in the parents. **See Table 1.**

Some relationships were carried out from parents’ survey such as:

***Age of youngest children in home and factor influencing travel choice: Figure1***

shows that behavior of parents affected more by safety factors, distance and transportation facility are also important.

***Table1. Average Influencing Factor Weightings***

Distance	2.4
Transportation facility	3.4
Safety – Stranger	4.0
Safety – Road	3.9.
Cost	2.6
Pedestrian facility	2.2

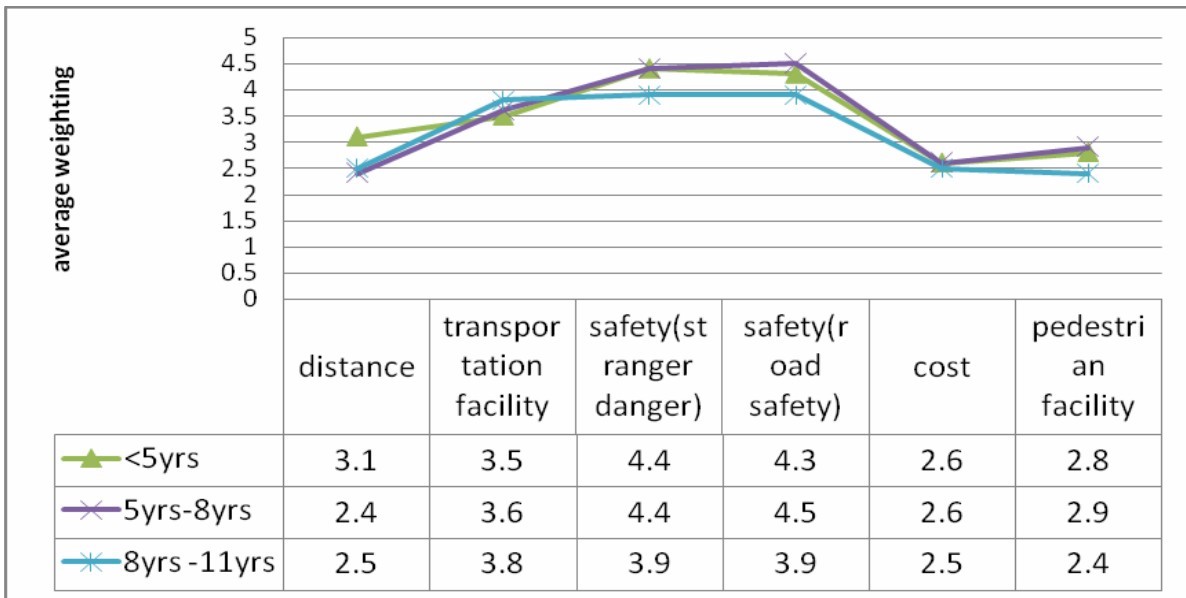


Figure 1 comparison between age and influencing factors.

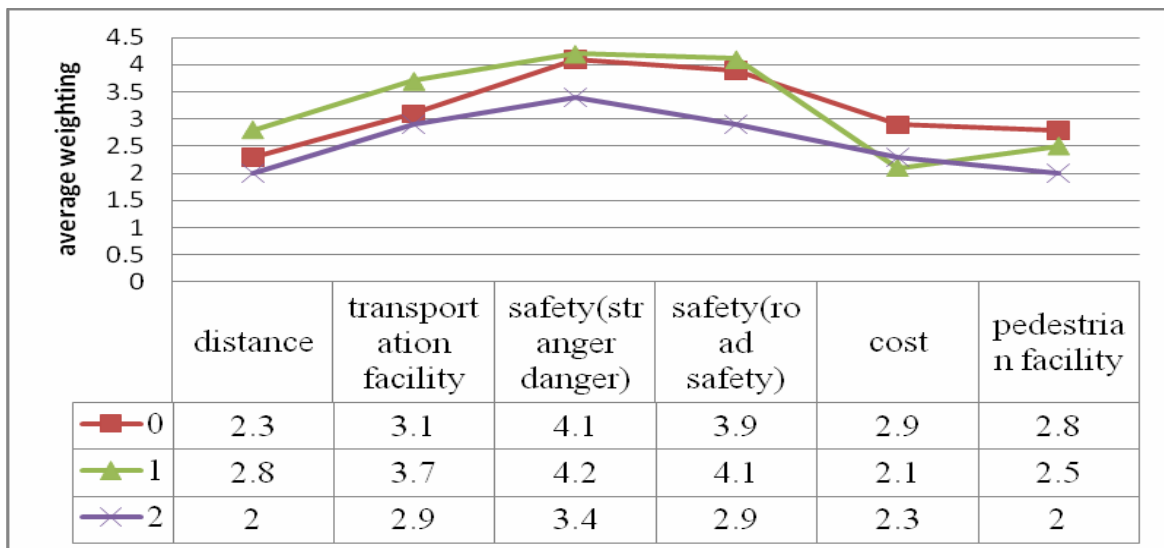


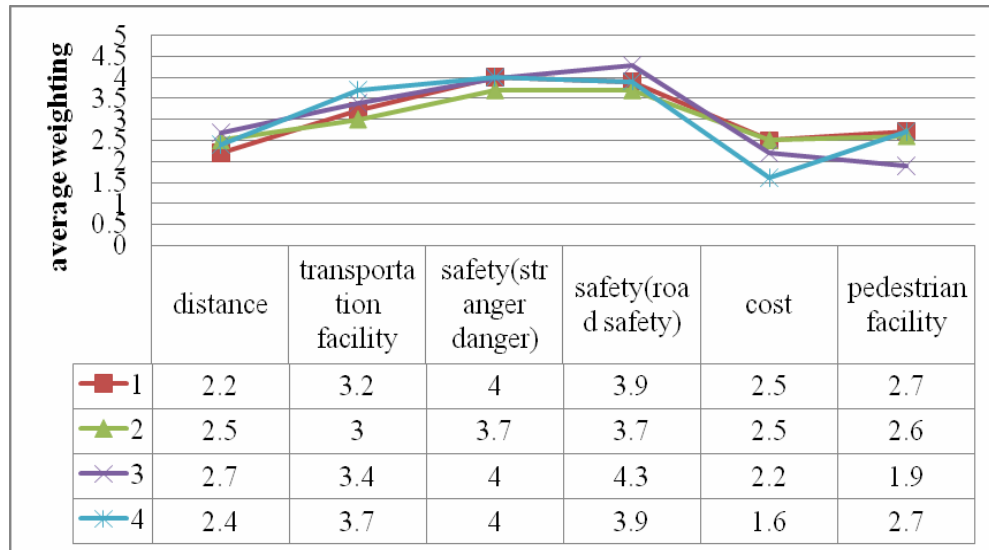
Figure 2 comparison b/w numbers of cars and factors influencing travel choice.

**No. of cars available in home and factors influencing travel choice:** Figure 2 shows that behavior of parents affected more by safety factors as compare to other

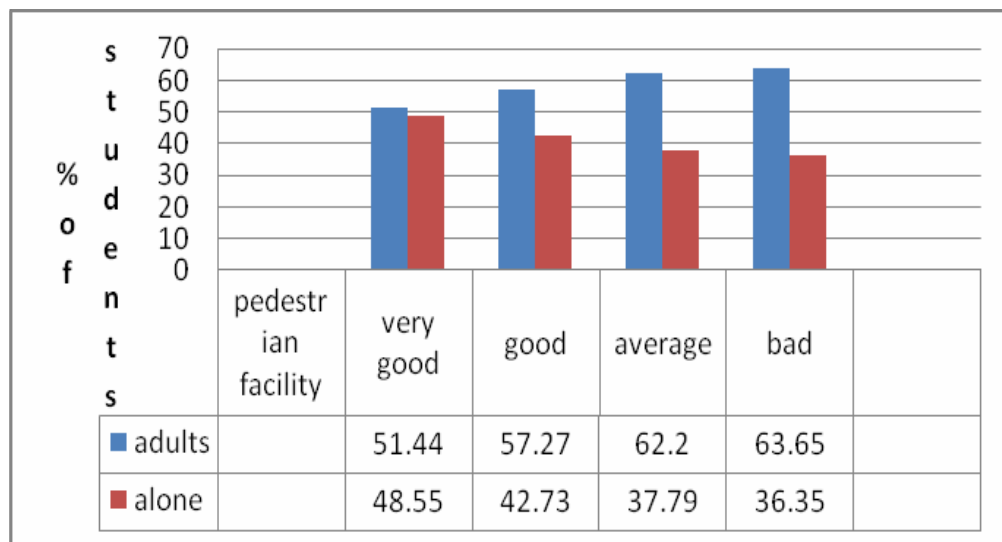
factors also we can observe that with increasing no. of cars affect the importance of transportation facility.

**No. of school going children and factors influencing travel choice:** Figure 3 shows that behavior of parents affected more by safety factors as compare to other

factors and they are more concerned about transportation facility as no. of school going children increasing.



**Figure 3 comparison of no. of school going children and influencing factors.**



**Figure 4 comparisons of pedestrian facility and independent travel**

***Pedestrian facility and independent travel:***

Figure 4 shows that in bad pedestrian facility students' travel with their parents more frequently.

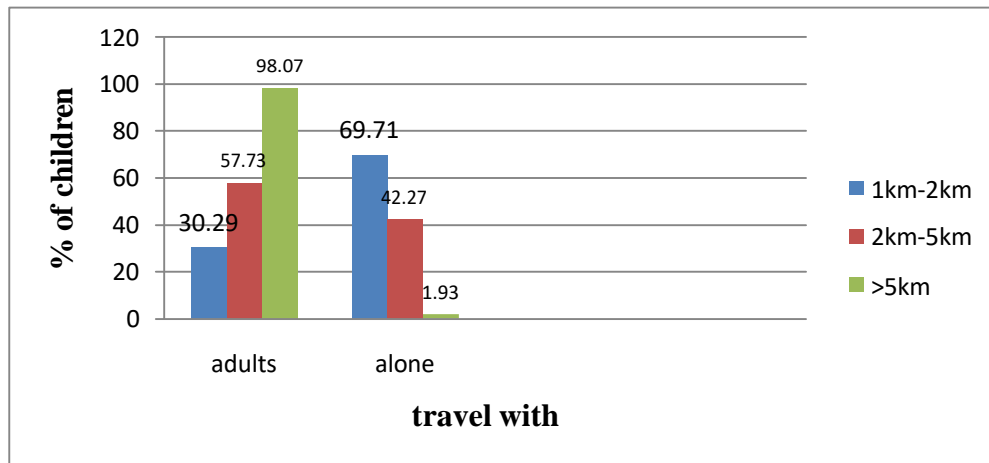
***Distance from school to home and independent travel:***

Figure 5 shows that as

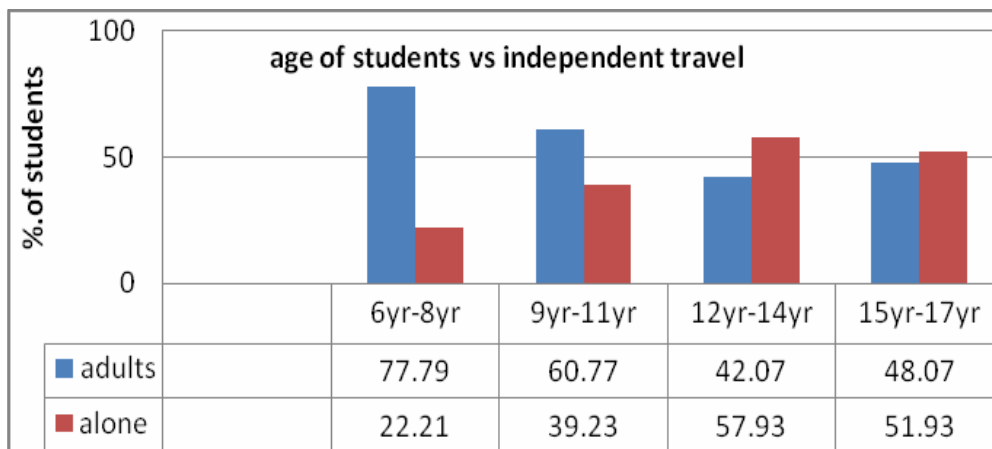
the distance increases children travel with adults more frequently.

***Age of the school children and independent travel:***

Figure 6 shows for lower age group children travel with adults more frequently as compare to higher age group.



***Figure 5 comparisons of distance and independent travel.***



***Figure 6 comparisons of age and independent travel***

## 5. CONCLUSION

### *Factors Influencing Travel Choice*

A number of factors which have a significant impact on the travel choices of school pupils have been identified in this study, and are listed below. There are a number of other factors which may affect parents' overall travel choices with their children which have been addressed in this study such as age, distance and pedestrian facility.

### *Safety Concerns*

Parents ranks safety as highest factor in their decisions regarding school travel choice. School pupils are most likely in danger with heavy traffic volumes. Children also often lack in judgment of speeds and distances. Increases in traffic volumes have resulted in an overall reduction in the safety levels of children travelling to school. Parents likely to be more concerned about the personal safety of their children. These safety concerns mean that parents travel with their children on their own, and feel that is necessary to accompany them.

### *Personal Safety*

Personal safety issues have been addressed in this study by including the extent to

which the pedestrian facilities are responsible for personal safety in the Pedestrian rating section of the neighborhoods survey. Reasonable correlation between pedestrian facility and school travel choices was evident in the case study.

### *Road Safety*

Road safety issues were addressed in the case study. The number of potential vehicle conflict points was also included in the pedestrian rating. Overall result for independence travel is that 60% children travel with their parents and 40% travel alone.

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