Child Safety Seat Behavioral Survey

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7^{th} November, 2012

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Outline of the Presentation

- Project Background
- Goals and Objectives
- Survey Design
- Data Analysis and Findings
- Conclusion

Project Background

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- In Nevada, motor vehicle crashes are projected to be one of the primary causes for death of children
- The Child Passenger Safety programs under the Office of Traffic Safety (OTS), focus upon increasing the awareness towards all kinds of child safety restraints
- The last study regarding child safety seats in Nevada, done in 2006, showed a low usage rate of 55.2% among infants and toddlers
- Since 2006, no study has been done to evaluate child safety programs in Nevada
- The current effectiveness of existing programs and campaigns was unknown

Project Background

- It is important to determine the current trends on child safety seat usage by means of an observational survey
- It is important to understand people's perspectives, preferences, and attitudes through a behavioral survey
- The previous observational surveys of child safety restraints have provided interesting trends
- It is valuable to determine the important factors affecting the usage of child seats and their relative level of importance

Project Goals and Objectives

Goals

- Facilitate the reduction of child fatalities in Nevada, arising from the low usage of child safety seats
- Unveil important information and key inter dependencies among the factors involved in people's preference, attitudes, and perceptions towards child safety seats
- Giving the transport managers and authorities an insight into the different aspects of child safety seat usage
- Better understanding of people's behavior relating to usage/non-usage of child seat
- Help authorities and agencies for a better design of campaigns for creating awareness regarding child seat

Objectives

- Develop an effective observational survey based on recommendations from the previous surveys on child safety seat usage
- Determine optimal and efficient ways to collect data in the field about child safety seat usage
- Through behavioral surveys, capture people's perceptions, attitudes, and preferences towards child safety seats
- Develop conclusions and recommendations based on the entire set of data collected through behavioral surveys

Survey Design

Survey Questionnaire Design

- Survey questions were designed in a scientific way, using marketing scales
- The standard questions formulated in the theory were picked and modified for our case of child seat survey
- The main section of the questionnaire form included:
  - Knowledge of Child Safety Seat Rules
  - Frequency of Use of Child Seat
  - Price Perception of Child Seat
  - Experience using Child Seat
  - General Attitude towards Child Seat
  - General Driving Attitude
  - General Information of Subjects

Survey Schedule and Sites

- Survey was conducted on 200 subjects representing all sections of the society
- An incentive of $5 was provided to each subject
- Public places where probability of finding parents with young children was more, were targeted, such as: Day cares, Babies R Us, Walmarts, Malls, Libraries, Parks, etc
- These locations were spread all across Las Vegas, Henderson and North Las Vegas area

Data Analysis and Survey Findings

Survey Findings

- Survey was done for 200 subjects
- The set of questions capturing different behavioral traits of the subjects were jumbled up in the survey form
- For analysis, they were again separated and grouped into sections to calculate a combined score indicative of that particular trait
- These groups were evaluated and a combined score was obtained for each of them:
  - Combined Knowledge Score (CKS) = 81.57 %
  - Frequency of Use (FoU) = 86.19 %
  - Price Perception Index (PPI) = 4.84
  - Combined Experience Score (CES) = 60.11 %
  - Child Seat Attitude Score (CAS) = 88.13 %
  - Driving Attitude Score (DAS) = 77.43 %

Survey Findings

- These scores were further studied against Age, Gender, Educational Level, Ethnicity, Income Group etc
- Some of the insightful trends are shown in the following slides

Ethnicity vs Combined Knowledge Score

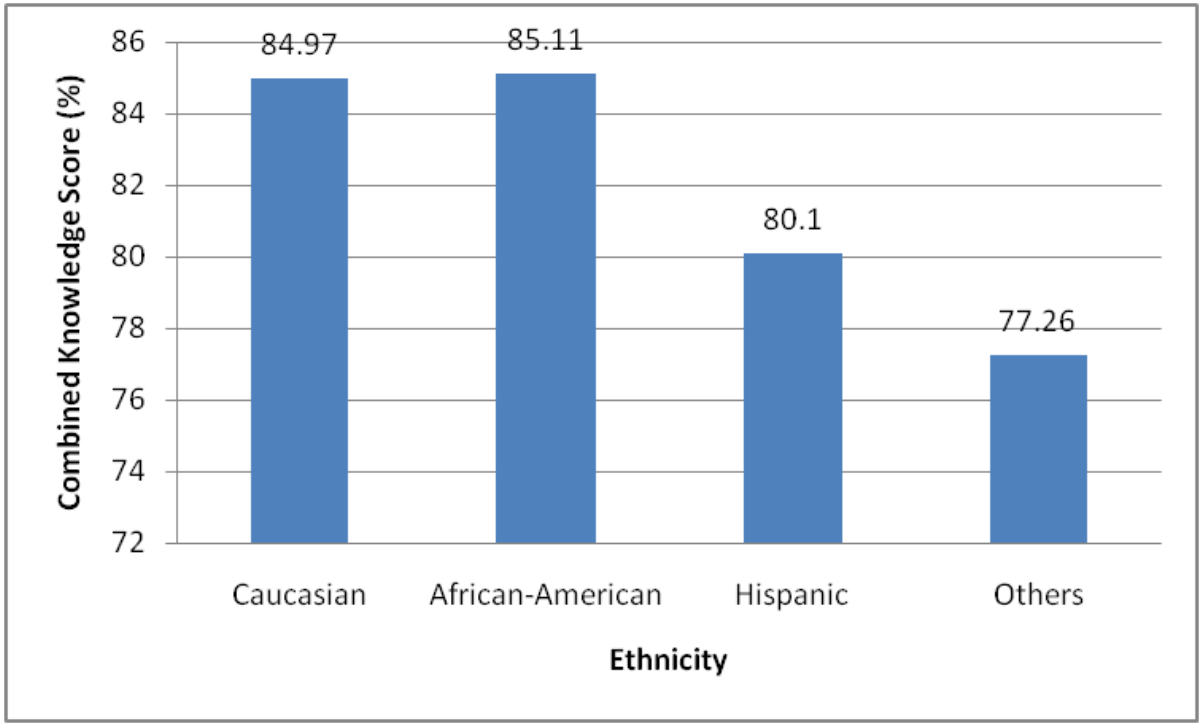

Figure : Ethnicity vs Combined Knowledge Score

Education vs Frequency of Use

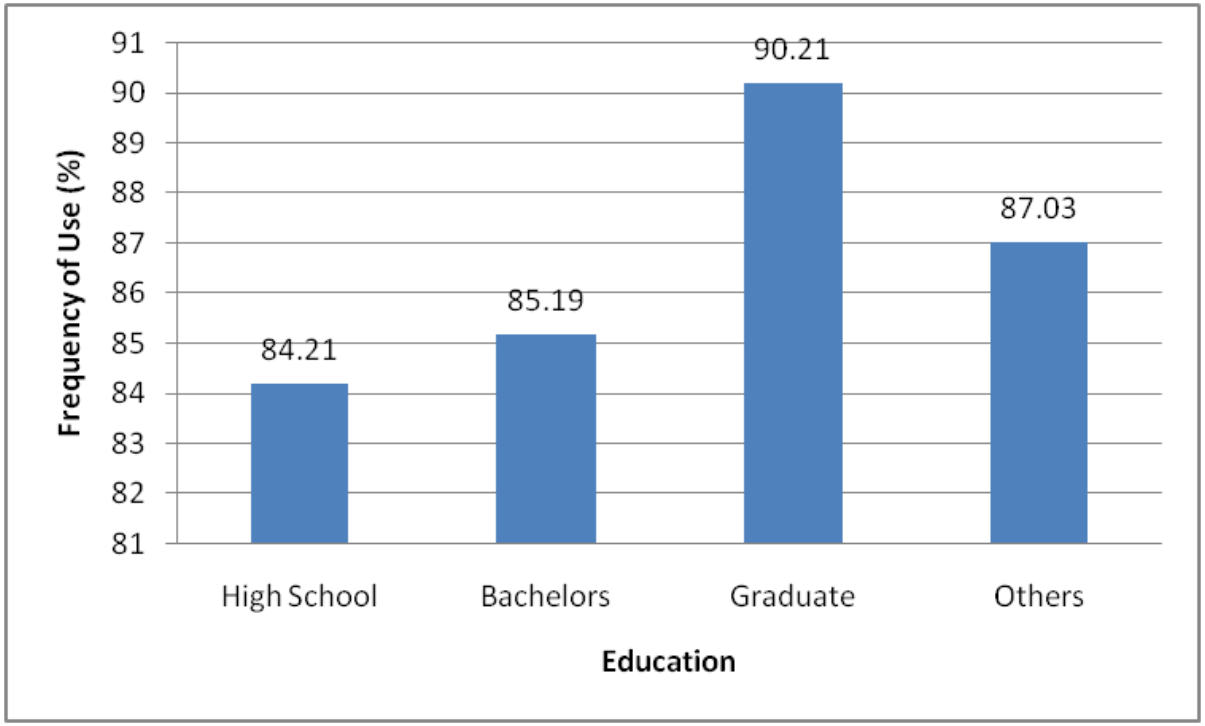

Figure : Education vs Frequency of Use

Price Perception

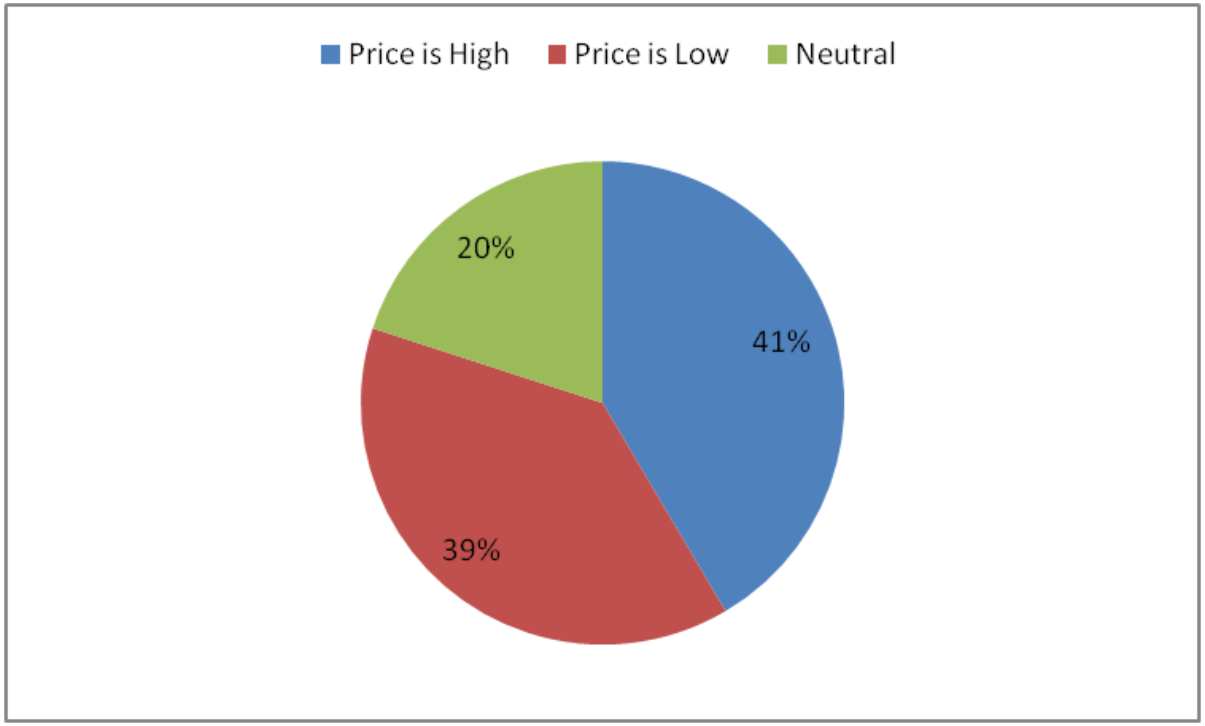

Figure : Price Perception

Gender wise Combined Experience Score

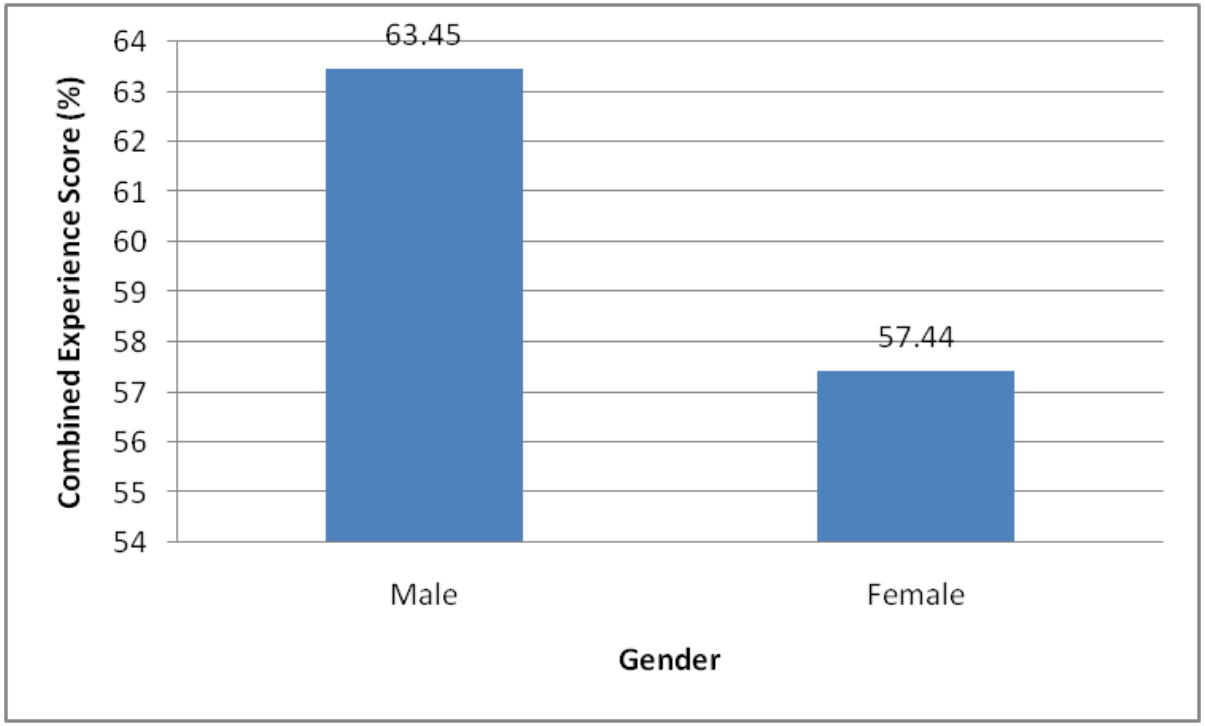

Figure : Gender wise Combined Experience Score

Gender vs Child Seat Attitude Score

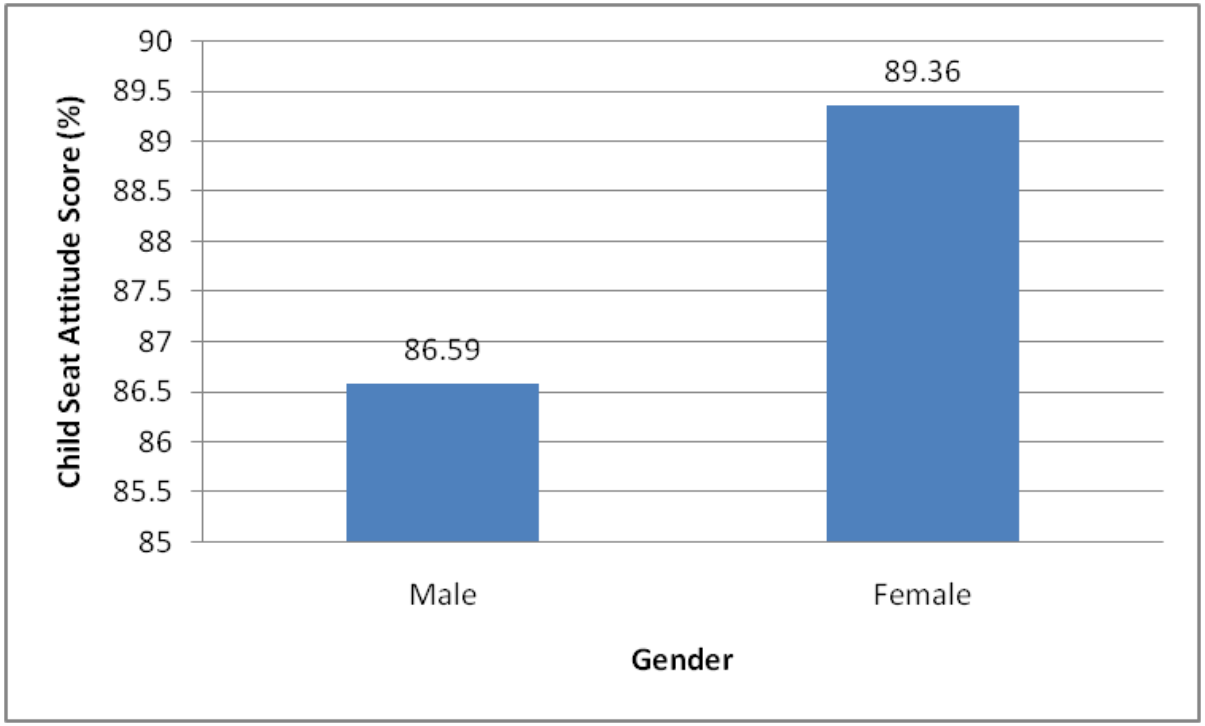

Figure : Gender vs Child Seat Attitude Score

Conclusion

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- This study was aimed at giving the transport managers and authorities an insight into the different aspects of child safety seat
- Results and detailed analysis of this study would help the authorities in better understanding of people's behavior relating to usage/non-usage of child seat
- And that would in turn help them in targeting particular sections of society, during the campaigns for creating awareness regarding child seat

Thank you!