Child Safety Seat Behavioral Survey

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7th November, 2012

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Outline of the Presentation

- Project Background
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- Conclusion
Project Background
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.
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
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 %
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

![Bar chart showing Combined Knowledge Score by Ethnicity]

- Caucasian: 84.97%
- African-American: 85.11%
- Hispanic: 80.1%
- Others: 77.26%

**Figure**: Ethnicity vs Combined Knowledge Score
Education vs Frequency of Use

**Figure**: Education vs Frequency of Use

- **High School**: 84.21%
- **Bachelors**: 85.19%
- **Graduate**: 90.21%
- **Others**: 87.03%
Price Perception

![Price Perception Chart]

**Figure**: Price Perception

- Price is High: 41%
- Price is Low: 39%
- Neutral: 20%
Figure: Gender wise Combined Experience Score

- Male: 63.45
- Female: 57.44

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Child Safety Seat Behavioral Survey
Gender vs Child Seat Attitude Score

Figure: Gender vs Child Seat Attitude Score
Conclusion
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!