

# EXPLORING CHILD PASSENGER SAFETY PRACTICE IN CHINA UNDER RAPID MOTORIZATION

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**Background and Aims:** China is undergoing rapid motorization and becomes the largest market where most new cars in the world are sold. Many child passengers lose their lives when traveling in motor vehicles in China, e.g., 2,000 fatalities in 2004. Since little was known for child passenger safety practice in China, this study aims to describe where child passengers are seated and whether restraints are used; and investigate the influence of children and/or parental attributes on seating position and restraint use.

**Methods:** Toll gate observation for child passengers aged  $\leq 12$  years was conducted in Shanghai during 2009. Another parent survey for kindergarten enrolled children aged 2-7 years was conducted during 2008-09. The adjusted relative risks (RR) comparing rear with front seating position among child passengers were evaluated using multivariate binomial regression with robust variance estimation. The adjusted RR comparing any restraint use with no restraint use was also evaluated.

**Results:** Both observation and survey studies revealed common front seating practice and low restraint use among child car passengers. Younger age ( $\leq 4$  years), single child in a car, and parental license status were associated with decreased likelihood of rear seating position; whereas tertiary education for mothers was associated with increased likelihood of rear seating selection for child passengers. Children traveling with drivers using no restraints were less likely to be restrained; whereas parents having drivers license were more likely to use restraints for their child passengers.

**Conclusion:** This study demonstrates common front seating and low restraint use as ignored safety concerns, and identified risk factors influencing restraint use and seating position for child passengers. These findings call for urgent attention and appropriate intervention targets to improve child passenger safety in China under rapid motorization.