

## A B S T R A C T

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*Purpose:* This study compares child passenger safety (CPS) practices of grandparents versus parents and determines grandparents' opinions on car safety seats (CSS), barriers to use, and ways to transport grandchildren safely.

*Methods:* Observational surveys were conducted on a convenience sample of drivers transporting children younger than sixteen years at 25 locations by certified child passenger safety technicians observing children in motor vehicles and recorded use of child passenger restraints. The drivers were surveyed on their knowledge, attitudes, beliefs, and practices regarding CPS. Data from drivers identifying themselves as grandparents were analyzed; also, three grandparent focus groups provided opinions on CPS practices.

*Results:* During the study 1758 parents transporting 2713 children and 284 grandparents transporting 391 grandchildren were included. While most drivers were restrained and used child occupant restraints, almost 25% of parents and grandparents chose the incorrect seat to transport the child, and greater than 68% had at least one harness error. Grandparents were more likely to have looser lower anchor straps or seat belts and have children younger than thirteen years in the front seat.

The focus group-grandparents had a favorable attitude toward CSS. Grandparents acknowledged the need for CSS but opined that CSS were difficult to use. Physical barriers included arthritis, back pain, mobility, decreased strength, and vision problems.

*Conclusions:* Grandparents and parents were equally likely to use CSS and choose correct seats. Compared to parents, grandparents were more likely to travel with their grandchildren with CSS installed with looser harnesses or an installed CSS with looser seat belt or lower anchors. Additionally, grandparents were more likely to have a child younger than thirteen years in the front seat. The use of community resources such as permanent fitting stations could help grandparents improve a grandchild's travel safety.

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