

What Can Child Car Seats Tell Us About Risk Communication?



by Dr. Zoe Hilton

In September, 2005, the Government of Ontario enacted legislation making booster seats mandatory for small children who have outgrown their toddler car seats. Studies in the U.S. show that a third of parents do not comply with booster seat laws, and fewer than 5% use them when there is no law. Car seat use is lower among parents who do not perceive a high risk. Risk perception, and how to communicate risk to people, is an important research area for MHCP, where risk assessments are conducted every day. In the summer of 2005, a partnership between the MHCP Research Department's and the Simcoe Muskoka District Health Unit provided us an opportunity to study risk communication in a nonforensic setting.

There are two main kinds of risk communication used in public education. One is the fear-based message, alerting the public to the risks they face (like the warnings on cigarette packs). Another is the benefit-based message, telling people how they can protect themselves (like leaflets giving instructions on health self-checks). In research at the MHCP, we have found that self-reported behaviour can also be guided by an accurate knowledge of the risks.

MHCP researchers joined a Health Unit information display at a drop-in car seat clinic, the Penetanguishene Children's Festival, and Santa's Village. We asked 60 adults about their attitudes towards booster seats, their knowledge about car seats and the law, and their parenting methods for getting children to use their cars seats. We also gave participants the list of home safety items recommended by the Health Unit website and asked them what they have in their homes. We asked whether their children use a booster seat, and the Health Unit inspected the seats at the car seat clinic.

Then we told some people about the new booster seat law together with a fear-based message ("This change is being introduced because every year in Canada, 35 children aged 4 to 9 years are killed in motor vehicle collisions. Another 360 children are seriously injured..."). We gave a benefit-based message to other people ("This change is

being introduced because every year in Canada, the lives of 35 children aged 4 to 9 years could be saved..."). We then asked participants whether they agreed with the new law and intended to use booster seats. The people we interviewed were very aware of car seat safety and supportive of the law. They were more split over the parenting attitude questions (resulting in a pattern of responses known as a bimodal distribution). Parents who disagreed with punishing children to get them to use their seat, also reported more positive attitudes towards booster seats, and had more home safety items. These findings are consistent with the notion that home and car safety are associated with positive parenting.

Parents who were not using booster seats correctly, were more likely to say that they are not convenient and that children don't like them.

With respect to risk communication, the benefit-based message made a very small difference to how much parents agreed that their children would use a booster seat in the future. Agreement with the law was exactly equal for the fear-based and benefit-based risk communications. Furthermore, over the course of the study, participants appeared to be increasingly aware of the impending regulations. This indicates the great success of the public health education campaign that was going on at the time, but it might have interfered with our ability to affect people's risk perception with our different tests of risk communication. In the next year or two, we hope to do a stronger test of the risk communication in our continued partnership with the SMDHU.

NB: In Ontario, boosters seats must be used by pre-school to primary-grade-aged children under 8 years of age weighing between 18kg (40lbs) and 36 kg (80 lbs.) with a standing height of under 145 cm (4ft. 9 inches). In a crash, children who are not properly restrained have more serious injuries than restrained children. Crash studies have found that injuries were reduced by 70% by using booster seats compared to seat belts.

Note: This article is copyright. Readers are invited to print this article for personal and educational uses but it cannot be put to any other use without permission of the author.