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The knee-jerk reaction to learning that a child has died of heatstroke after having been forgotten in a car is to accuse the driver, usually the parent, of negligence. However, this tragedy has occurred over a thousand times in the past thirty years to loving and attentive parents, who would never consider doing anything to cause harm to their child.

I have been studying this phenomenon for the past two decades from a neuropsychological perspective. Forgetting a child in a car is called a failure of prospective memory, which is a failure to remember to do something in the future. Prospective memory failures can be relatively benign, such as forgetting to stop at the store on the way home or leaving a coffee cup on the roof of your car. However, many different types of prospective memory failures can be tragic, such as when a pilot forgets to set the flaps properly on the wings, which can cause a plane to crash after take-off, or when firefighters forget to shut off the stove as they leave the firehouse, or police officers forget their loaded weapons in public bathrooms.

In each of these examples of prospective memory failure examples, a person goes into an 'autopilot' mode, a habitual behavior, such as getting ready for work and driving directly to the office on a typical day. These habitual behaviors are controlled by a powerful brain habit memory system, which can override a separate, conscious memory system, which was intending to remind the parent of the child in the car (or to set the wing flaps properly, or to remember the gun in the bathroom).

Extensive research has shown that competing factors can cause prospective memory to fail rapidly, even in a matter of seconds. Examples of factors that cause prospective memory to fail include stress, a disrupting phone call, and sleep deprivation, which is very common for parents caring for an infant child. A lack of visual or verbal reminders, like a sleeping child or a misplaced diaper bag, increases the chances for a person to lose awareness of the child in the back of a car. Part of the tragedy is that the brain creates a false memory that the parent had dropped off their child, as planned, at daycare. These parents return to their car with the plan to pick their child up at daycare, only to find the child had died from heatstroke during the day.

The brain memory systems that fail when people forget children in cars are the same as those systems that cause us to forget to shut off the headlights when we arrive at a destination. Just as auto manufacturers have built-in systems that shut off headlights, we must have built-in systems that detect a forgotten child in a car.

Therefore, it is important for people to understand that the brain is a magnificent, but flawed, memory processor. This means that the best parents and caretakers can unknowingly and unintentionally, lose awareness of a child in the car. Once people accept that possibility, they need to take steps to be sure they are reminded of the child in their car when they arrive at their destination. That can be a low-tech approach, which is to put something unique to the child's presence in the front of the car as a reminder the child is in the back. A far superior approach is to have technology in the car to alert a driver of a child's presence when the driver exits the vehicle.