

**Summary:**

## **Aggressive driving - a literature review**

Aggression in traffic, aggressive driver behaviour and its association with road accidents has definitely been put on the agenda in the recent years. One of the major problems concerning aggressive driving behaviour, and the possible association with accidents in traffic, is to define in a clear way, what ‘*aggressive driving behaviour*’ actually is. This difficulty may be a reflection of the variation in definitions of aggression proposed by experts in this field. A review of the literature suggests that three main types of definitions exist. The first defines aggressive driving as direct physical assaults on other road users. The second focus on any form of driving behaviour with the intention to injure, harm or frighten other road users physically or psychologically. The last definition put emphasis on deliberate and wilful driving behaviour that while not intended to harm/frighten other road users show disregard for their safety and wellbeing.

The literature review concludes that the last definition is the most functional one. This means, however, that aggressive driving behaviour will include acts that commonly are referred to as “reckless driving” or even “active driving” (e.g. fail to give right of way, tailgating). A recommendation is therefore to use the term “reckless driving” instead of “aggressive driving” if this definition is applied. This will make it easier to achieve a common understanding of which types of driver behaviour that is referred to.

Several studies indicate that driving behaviour that is labelled as aggressive or reckless may increase the risk of traffic accidents. The most dominant ones are excessive speeding, tailgating, failure to yield the right of way for other road users and red-light running. At the same time, explicit aggressive acts like rude gesturing, flashing headlights, sustained horn-honking and yelling does not seem to increase the accident risk. However, drivers who behave in such ways are also more likely to conduct other types of aggressive driving behaviour that increases the risk of accidents.

Studies indicate that the prevalence of aggressive driving is likely to increase during certain traffic situations. The most common ones are situations where drivers’ progress in traffic is slowed down due to unexpected obstructions (e.g. queue outside rush-hour) or unexpected behaviour of other road users (e.g. slow driving when it is difficult to overtake). At the same time, certain characteristics of the driver seem to increase the likelihood of aggressive driving under such circumstances. Low frustration tolerance, low empathy, mild social deviance and a need for seeking excitement are of particular relevance in this context.

There seems to be no gender difference of importance pertaining to how much irritation and anger drivers experience on the road. However, male drivers report more aggressive acts in traffic than female drivers. This suggests the irritation and

frustration experienced during driving is more likely to result in aggressive driving among male drivers. The propensity to commit aggressive acts in traffic seems to be highest among young drivers, especially young males.

Some studies suggest that characteristics of the vehicle may contribute to aggressive driving. The results indicate that new cars are driven more aggressively compared to older ones, especially new cars with high engine power, fast acceleration ability and a “sporty” image. It cannot, however, be ruled out that this result is due to that drivers who anyway would have driven aggressively chooses to drive such cars. It is thus uncertain whether it is the car or the driver or a combination of both who contributes to aggressive driving.

Measures to reduce aggressive driving have primarily been carried out in the US. Such measures usually include increased police surveillance concerning aggressive driving acts such as tailgating, dangerous overtaking, excessive speeding and red-light running. The use of unmarked police cars seems to be a popular strategy. The measures are often combined with increased media attention concerning the police efforts to target aggressive drivers. Other measures include the use of “green numbers”, where road users can dial in the licence number of the driver committing aggressive acts in traffic. There are no formal evaluations of these measures aimed at reducing aggressive driving, but evaluations conducted by the police themselves indicate that such measures may reduce the prevalence of aggressive driving, as well as the number of serious and fatal accidents.

Another measure applied is anger-management courses for aggressive drivers. Studies show that such courses may be beneficial in order to decrease the irritation experienced when driving, as well as the frequency of aggressive acts in traffic. The effects are, however, measured at a relatively short time after the completion of the course, meaning that the long-term effect of anger-management courses is uncertain.