



Name:

Instructor:

Course:

Date:

## Highway Safety

Road accidents have taken away millions of lives globally. The World Health Organization (WHO) reports show that about 1.25 million accident-related deaths occur every year (Wegman 66). Furthermore, the organization has reported that about 3400 fatalities and 50 million injuries are caused by road accidents annually (Wegman 66). The figures have motivated experts, engineers, policymakers, and drivers to look for ways of remaining safe on the road. In addition, the increasing number of casualties associated with road accidents have attracted the interest of researchers with studies being carried out on ways of improving safety. One of the factors that have been implicated in the increase of number of road accidents is speeding (Insurance Institute for Highway Safety). The manner in which the issue of speeding relates to the chances of a car accident has attracted the interest of experts, engineers and the general public. To some people, overspeeding should be regarded as one of the principal causes of road accidents. There is another category of people who are of the opinion that high speeds alone cannot be linked to the rising risk of accidents and fatalities (Aarts and van Schagen 215). However, everyone should agree that limitations of speed are an important tool that can be used to enhance highway safety and prevent accidents.

Speeding is one of the issues correlated with fatal car accidents that occur on highways when one is driving above the recommended limits or traveling fast in unfavorable road conditions (Aarts and van Schagen 216). Stakeholders are yet to reach a consensus on the actual link between car crashes and speeding because of the diverse issues that are linked to accidents on highways. Aarts and van Schagen noted that there are several issues such as weather conditions, car stability, and driving styles that may increase the risk of accidents (216). These concerns notwithstanding, there exist the preset speed limits on major highways, urban centers and residential areas with the primary objective of reducing crashes. The signs inform drivers about the speed regulations that they should obey. There are two primary reasons for placing speed signs on highways. First, they can improve highway safety by reducing the risk of motor accidents. Second, motorists get immediate and accurate information about the allowed speeds at specific areas of highways and freeways from the signs.

Speed limits may also lower the chances of a driver getting involved in a serious accident on major highways. Recent research conducted by the Insurance Institute for Highway Safety (IIHS) showed that the decision to lower speed limits on major city streets by about 4 mph could significantly reduce the number of accidents and enhance the safety of pedestrians, drivers, motorists, and cyclists (Insurance Institute for Highway Safety). The IIHS researchers focused on Boston, Massachusetts, where the governments had reduced the speed limits within the city from 30 mph to 25 mph following the state laws that were passed in 2016 (Insurance Institute for Highway Safety). The limitation was also applied to the main municipal roads, business districts, and densely populated regions. During the study, the researchers examined the speed at which vehicles traveled and the prevalence of accidents in Boston (Insurance Institute for Highway

Safety). Additional data was collected from the Providence, Rhode Island, where similar changes on speed limits had not been implemented. By comparing the data from the two regions, the IIHS researchers found out that reduced speeds lower the risk of crashes and severe injuries to other road users (Insurance Institute for Highway Safety). IIHS noted that the lack of speed limits allowed drivers to engage in reckless and fast driving and to race even under poor road conditions (Insurance Institute for Highway Safety). When drivers speed in densely populated areas they expose road users and pedestrians to increased risk of accidents (Aarts and van Schagen 216).

The placement of speed limit signs on major roads and highways can also reduce speed differentials and minimize the braking distance and force. In most instances, the causality of road carnage has been associated with the speed differentials, braking force, and distance required to bring the car to a stop (Brubacher 5). However, when drivers know the recommended speeds on a given section of the road, they will drive in a manner that does not expose others to any kind of danger. In addition, drivers who tend to travel fast and change lanes from time to time may be encouraged to slow down and be more careful on highways (Insurance Institute for Highway Safety). In the end, the dangers associated with reckless driving and the need to move from one lane to the other at high speeds will be lessened. However, when traveling at higher speeds, stopping the car abruptly can be a major challenge (Aarts and van Schagen 216). The situation becomes more complex when other factors, such as poor visibility and sharp corners come into play. Previous research has shown that motorists are likely to lose control when they are forced to make abrupt stops while driving at high speeds. In such contexts, the risk of accident and road fatality is increased significantly (Insurance Institute for Highway Safety). One of the solutions for the problem is to ensure that drivers move at a sanctioned speed that will not provoke accidents and expose people on the road to danger.

IIHS also conducted a study to examine how limits had reduced accident-related deaths in the last two decades. According to the study data, 33,500 lives were lost due to the lack of speed limits on different roads and highways in the last 20 years (Insurance Institute for Highway Safety 2). In the year 2013, it was reported that 1,900 additional fatalities were caused by the lack of clear speed limits in high-risk areas (Insurance Institute for Highway Safety 2). The speed limits for diverse regions, highways, and freeways are set by the state governments. However, local governments may also make recommendations on the maximum speed limits that should be adopted in certain areas (Insurance Institute for Highway Safety). The proponents of high limits have criticized the laws on speed limitation and argued that they do not reduce the risk of accident (Brubacher 2). However, recent investigations show that the failure to regulate the speeds at which drivers travel may result in an increased number of deaths and injuries.

People and groups that advocate for the regulation for speeds on major highways and roads often base their arguments on the data reported in different regions. For instance, Spain and Germany have adopted a variable speed limitations method that not only helps in controlling traffic but also contributes to the process of ensuring that road users remain safe (Brubacher 2). These nations use an approach that allows for the regulation of the motor vehicle speeds in connection to the prevailing circumstances such as the traffic flow, climate conditions, and the lanes selected by the drivers. The speed limits can be fixed at 40km/h, 60km/h, and 80km/h (Soriguera 257). The method usually allows for effective usage of the vehicle while also protecting other motorists from the mistakes of drivers on the roads. Soriguera noted that the use of variable speed limitations approach in major freeways has significantly reduced cases of accidents and fatalities by about 20 to 30 percent (257). Today, speed limits exist in both developed and developing countries to deal with the challenge of accidents that often results in deaths and adversely affects victims and their families.

Critics and opponents of the speed limits have remarked that the intervention may not be the answer to the highway security challenges being experienced globally. For some people, road accidents are caused by a wide range of factors such as distracted driving, poor skills, speeding, and driving under the influence of alcohol or drugs (Wegman 67). Therefore, the argument to categorize speeding as the primary reason for the increase in the number of car accidents and fatalities is not prudent as it overlooks other factors that lead to road carnage. Other critics argue that the decision to speed can be associated with positive effects such as reduced travel time and increased mobility. While the critics appear to raise valid points regarding the complex nature of accidents and the benefits associated with higher speed, they do not negate the fact that speed limits can reduce chances of crashes, the severity of accidents, and the number of deaths on the roads (Soriguera 257).

Another group believes that the speed limits are not effective because drivers usually violate them. The argument is based on the fact that there are drivers who overspeed even when the road signs indicate the speeds at which they should travel. Some decide to drive slowly not because of the speed laws but out of their own volition (Friedman et al., 1626; Insurance Institute for Highway Safety). It is undeniable that many drivers are caught and fined for violating the regulations including those related to speed. However, the trend does not signify that the speed limit signs should not exist on the road. Instead, there is a need for governments and regulatory agencies to come up with interventions that will assist in enforcing the limits and ensuring that drivers do not speed on highways and freeways (Soriguera 257). Besides, motorists should be educated about the importance of speed limits.

Finally, some people believe that speed regulation should not be embraced in modern times because it has been bypassed by technology. Nations around the world are working towards the development of roads that allow drivers to travel at high speeds (Wegman 67). Car manufacturers, on the other hand, strive to embrace technologies that make their vehicles fast, efficient, stable, and safe (Wegman 67). These advances in technology, in the view of speed limit critics, have made both cars and highways more reliable compared to the previous years. However, it is also imperative to state that accidents are not only correlated with the design of the road or car. Factors like behavior and attitude of the drivers on the highway can upsurge the risk of car crashes and cause fatalities (Soriguera 257). Therefore, speed limits can help in improving highway safety around the world.

Global statistics show that road crashes result in the death of millions of people globally (Wegman 67). In addition, the accidents put a significant burden on families, governments, and the healthcare sector. Therefore, attempts have been made to come up with strategies that will address the menace of road crashes. In many states and cities, speed limits have become an important intervention that is bound to help reduce the number of accidents. Critics and opponents, however, state that a road accident is a complex issue that cannot be solved by simply limiting the speeds. Others believe that advances in technology have resulted in better road and car designs. While these factors may be valid, it does not mean that speed limits are not effective. Consequently, governments and regulatory agencies should assess the state of roads and highways and initiate speed limitation laws that will improve highway safety.