

Distractions and Driving

Introduction

The topic that I chose to research is distractions and driving. With the world expanding its technology and hectic schedules, more and more people are finding ways to become easily distracted while operating vehicles. Distractions are things such as cell phones, people, food, reading, talking, etc. People can find almost anything to become a distraction while driving. In December 2005, my family and I took a huge loss because of a car accident. My younger sister, Danielle Scarpetta, was the passenger in a vehicle when this vehicle was hit by a drunk driver. Also, note the person driving my younger sister was making a call on her cell phone and turned the car too quickly not realizing that an intoxicated driver was coming up the street on the opposite end speeding. She was only two weeks shy of sixteen years old and had her whole life ahead of her. She was already working at a restaurant in Georgetown and still attending high school. I was very close with my younger sister since we are only one and a half years apart. Her memory will live on in my heart forever and I always make sure that I am not distracted while driving my car for my own safety and for others as well.

I will never be able to see my younger sister again and I have had to find ways in my heart at the time to cope with the loss and forgiving those who were intoxicated and distracted. Many people cause accidents and are victims of them because of distracted driving. A law had come out that using a cell phone while operating a vehicle is illegal and people still continue to use cell phones while driving because they are always in a rush and have no time to make the phone call before leaving their home, work, etc. I feel that communities should take distracted driving more seriously because an accident could change people's lives forever. I am very interested in learning about other distractions and how to avoid them and how to make a difference out on the busy roads.

Section 1: Background and Problem Statement

Distracted driving is a problem at which the driver is not paying their fullest attention to operating a vehicle and therefore placing others in harm's way. This problem must be resolved so we can effectively lower the rate of accidents caused by distracted drivers.

Distracted drivers cause accidents which cause deaths which means that families around the world suffer. Distractions in the car don't have to be there if we do not want them to be. Teens have one of the highest rates of accidents in the United States. Around eleven teens die every year because of car accidents. There are many leading causes of teen crashes, such as being inexperienced, driving with other teens, nighttime driving, not wearing seatbelts, drowsiness, reckless driving, and finally the worst, impaired driving.

Most teens that set out on the open roads have not much experience at all. Parents driving more often with their children will lower the rates of inexperienced driving accidents. Another risk factor is teens driving with other teens. Two out of three crashes per year happen when there is more than one teen in the car. Limiting the number of teens (distractions) is very helpful to being able to concentrate and get used to operating the vehicle.

Eight out of ten car accidents that take place happen within only three seconds of the driver becoming distracted. The most common distractions for teenagers are: cell phones, in-car electronic devices, text messaging, eating, playing CDs or tuning the radio, and yelling out of the window. All of these risk factors involve the teen taking their eyes away from the road and concentrating their minds elsewhere whether it be on another friend or on what song is playing. Text messaging can be found in some states and situations worse than drunk driving. The person intoxicated would be driving impaired but looking at the road whereas someone texting would be staring down at their phone not knowing what is going on in front of them.

Impaired driving is still distracted driving. Someone who is drunk is distracted and dysfunctional, so they are unable to get behind the wheel. Guess what? People do so anyway. Between the ages of fifteen and twenty, one out of three fatal car accidents in 2007 revert back to drinking and driving. There is a zero tolerance for alcohol in the United States under the age of twenty-one therefore these teens should not have been drinking anyway. If you are caught by the law, you will pay the price which could mean jail or taking the life of somebody's loved one.

Distractions do not always have to start with the person driving. They could come from any other source. This is why it is always important not to be distracted but alert at all times. For example, being on the lookout for debris in the road or road damage, and being able to recognize if a street light is not working properly. Many accidents are caused by non-functioning street lamps.

In order to primarily research and come up with goals to lowering statistics of car accidents in the United States, NHTSA had conducted a study in 1991 by analyzing the relationship between the driving performance and distractions. The three main distractions viewed were cell phones, audio systems, and navigation systems. Their goal from this research was to prove the link between car accidents and its influence by distraction. The NHTSA's study on cell phone use while driving concluded that it had an influence on the risk of a crash. Drivers who were entering destinations into their navigation systems were very much distracted although the test subjects thirty-five years and younger tested better than compared to fifty-five years and older. One situation where technology proved not to be a distraction was the voice-activated systems. There was no difference for the voice-activated system use between older and younger drivers. Older drivers once again proved to have more difficulty using visual manual entry systems than the younger drivers.

Distractions are a big problem when it comes to driving. Driving a vehicle is a big responsibility because it can take your own life or the life of others if not taken as a serious matter. Car accidents happen every day in the United States and sometimes there is no avoiding them. It would be better to be more alert, aware, and ready for them than to have one's mind elsewhere. As of right now, the only progress that is being made towards having safer drivers out

on the road is law enforcement. The law is cracking down on drunk driving, cell phone usage, and people clearly not paying attention to what they are doing. If a person receives more than three tickets within two years, they are forced to attend a driving retraining class and then must keep their record clear for at least one year before receiving another ticket. This method is being used today to teach people the consequences of their actions before they create alternate consequences, which are irreversible.

- Web site #1 Name: NIOSH Hazard Review (Healthy People 2010)
- Web address: www.cdc.gov/niosh/docs/2003-119/pdfs/2003-119.pdf
- Background Information:
 - This online article provided me with useful information regarding Driver's Fatigue and how it has a huge impact to everyone on the road. It is known to be a leading contributor to roadway crashes to the general population as well as workers.

- Web site #2 Name: Interim Recommendations for Driving Safely in a Disaster Location
- Web address: <http://emergency.cdc.gov/disasters/interimdrivesafely.asp>
- Background Information:
 - This online article provides helpful hints and rules of the road on how to avoid accidents and what not to do while driving. It reminds readers of what to be alert for and how tips such as planning a trip in advance are a safety precaution.

- Web site #3 Name: 8 Danger Zones for Teens Behind the Wheel
- Web address: www.cdc.gov/parentsarethekey
- Background Information:
 - This was one of my favorite articles because it supplies me with every reason as to why teen driving has one of the highest accident causing rates. It covers every rule and standard that a teen should know precisely before getting behind the wheel.

Section 2: Research

Several studies were done involving distractions and driving in general. The main causes of distractions in experiments usually involved a person's age versus what distracted them the most. If you think about it, an elderly person is less likely to use a cell phone or more modern technology while driving so this makes them safer in this respect. An elderly driver may have a slower perception of the world in the vehicle. Distractions are different for everybody as they range from eating, eye wandering, or playing in the car.

- Web site #1 Name: Science Direct
- Web address: <http://www.sciencedirect.com>
- Summary of the research:
 - This article was a basic study of distractions within the lives of real people. Cameras were installed within seventy different volunteers' cars. Over the course of one week, their behaviors were examined. The most commonly found distractions were eating, drinking, preparing to eat or drink, looking for objects,

touching the vehicle controls, and also distractions found outside of the vehicle but are unknown to this study since the camera is on the inside of the car. This study project was found to associate distractions with a significant decrease in the driving performances of the individuals. The distractions had led to no hands on the steering wheel, attention focused inside of the vehicle rather than on the outside road, and finally wandering of the vehicle into other lanes.

- Web site #2 Name: PubMed: Impact of driving cessation on daily transportation utility in elderly people with cognitive decline: a survey of patients in the memory clinic of an urban university hospital.
- Web address: <http://www.ncbi.nlm.nih.gov/pubmed/>
- Summary of the research:
 - This study had a goal to examine the impact of older people with cognitive decline utilizing daily transportation. The method of study used was a questionnaire which one hundred and one older people responded to. This questionnaire resulted in 47.5% still having a license, 15.8% were holding licenses that had expired, and finally, 36.6% held no driving experience whatsoever. The majority of license holders was 77.1% and were also active drivers. It also noted that persons who had dementia utilized public transportation. Although the patients with dementia were advised to cease driving and use public transportation as means to traveling, they required special attention to find alternative ways to travel.

- Web site #3 Name: PubMed: older Drivers and Failure to Stop at Red Lights
- Web address: <http://www.ncbi.nlm.nih.gov/pubmed/>
- Summary of the research:
 - This article focused on the failure of elder persons being able to stop at a red traffic light. When a traffic light is red, its indication is to stop the vehicle before or exactly on the stop line on the ground making way for traffic. A yellow light directs cars to slow down and prepare to stop at the line before the light turns red. A green traffic light, on the other hand, allows cars to have the right of way to pass through the intersection safely. This examination was based on one thousand four hundred and twenty five drivers between the ages of sixty-seven through eighty-seven. The data are based on a report of their driving abilities and performance over the time period of one year and found that 3.8% of the older drivers failed to stop at a red traffic light. Of the 3.8%, 15% failed ten percent or more of the traffic lights they passed. It is also noted that a person with a smaller vertical AVF (the extent of the peripheral vision) had a higher rate of failing to stop at these red lights. The conclusion of this assessment was that the failure to stop at a red light was uncommon in elderly drivers and is associated with the ability to pay attention to visual events.

Section 3: Statistics

- Web site #1 Name: DMV: How to Drive Distraction Free
- Web address: <http://www.dmv.org/how-to-guides/drive-without-distractions.php>

- Summary of the statistics:
 - NHTSA (National Highway Traffic Safety Administration) summarizes that 80% of all car crashes and 65% of all near-accidents will involve a form of distraction. The statistics inform us that people are much more likely to get into an accident when they are distracted. Many drivers are making an effort to change their daily habits and lead a more safe life on the road. The root of driver distraction is the need to drive and the need to interact with the immediate environment.

- Web site #2 Name: Kids and Cars
- Web address: <http://www.kidsandcars.org/>
- Summary of the statistics:
 - This article specifically spoke of the auto accidents in the United States in the year of 2005. In 2005, there were about 6,420,000 automobile accidents and 2.9 million people involved in these accidents were injured and 42,636 were killed. Estimated everyday, 115 people die due to a vehicle accident and this is one death every thirteen minutes. Backtracking a couple of years to 2003, there were 6,328,000 car accidents in the United States with 2.9 million people injured and 42,643 killed. Lastly, in the year 2000, there were 6,316,000 car accidents in the United States. The number of injuries was 3.2 million and 41,821 people were killed. The number of incidents seems to be increasing as the years move forward.

- Web site #3:
- Web address: <http://www-fars.nhtsa.dot.gov/Main/index.aspx>
- Summary of the statistics:
 - This article provides helpful information and statistics about accidents that occur in the United States as well as in Europe and other foreign countries. When compared, accidents in the United States are much higher than elsewhere. The causes of these accidents were primarily focused on alcohol other than distractions. Worldwide, about 1.2 million people are killed yearly and fifty million people are injured and become disabled. About 90% of deaths are caused in countries with low or middle level incomes. Over half of the accidents that occur the drivers are between fifteen and forty-four years of age. In 73% of these cases, the driver is a male. The total number of accidents estimated that happen in the United States every year is six million. This estimate is including injury and death incidents. Overseas, the highest accident rate happens in Italy and Poland. Intoxication plays a huge role in car accidents. Between seventy and eighty people will die every day due to alcohol-related car crashes. People that hold a valid license and a previous record of convictions hold a higher percent of accidents. For example, in the year 2008, 5,445 were in an accident that had previous convictions under their belt.

Section 4: Consumer Information

- Web site #1 Name: Impaired Driving: Medline Plus
- Web address: <http://www.nlm.nih.gov/medlineplus/impaireddriving.html>

- Summary of the information:
 - Impaired driving refers to conducting the following while driving a vehicle:
 - Drinking alcohol
 - Illegal or legal drug use
 - Fatigued driving
 - Cell phone use and texting
 - Any medical condition which affects driving

- Web site #2 Name: Distracted Driving Brochure
- Web address: <http://www.aaafoundation.org/pdf/DistractedDrivingBrochure.pdf>
- Summary of the information:
 - What are the physical, mental, and combination components of distracted driving?
 - Physical – these are distractions that will cause a person to remove their hands from the wheel or eyes from the road. Example – Eating: It slows your ability to be able to respond to quick changing conditions and may as well block a part of your field of vision.
 - Mental – this distraction which is equally dangerous will stray your mind from the focus of driving. Example – Discussion: Communicating with another person via cell phone, hands-free device, or passenger can lead one’s mind away to become absorbed within the conversation or the stress of it and they can become unaware they are operating this vehicle.
 - Combination – these distractions have both elements of the physical and the mental. Example – CD: Changing a CD in your car may seem simple enough to do while operating the car itself. What people don’t think it that they need to remove their eyes off of the road to be able to make sure they are choosing the right CD they prefer to listen to as well as removing their hands from the steering wheel to be able to get the CD out of its case of binding. This creates a huge distraction because all of someone’s time and energy is being focused on removing this CD and putting it into their player.

- Web site #3 Name: Driver Safety: Top 7 tips for older drivers
- Web address: <http://www.mayoclinic.com/health/senior-health/HA00042>
- Summary of the information:
 - Stay physically active
 - Manage any chronic conditions
 - Schedule regular vision and hearing tests
 - Understand your limitations
 - Drive under optimal conditions
 - Plan ahead
 - Update your driving skills

These seven tips are ways to make driving a lot simpler and healthier for elderly people. By staying focused, having a plan, and being on track, one should be able to avoid accidents at all costs.

Section 5: Solutions to the Problem (or Issue)

- Web site #1 Name: Volpe National Transportation Systems Center
- Web address: <http://www.volpe.dot.gov/hf/roadway/saveit/index.html>
- Summary of the information:
 - The National Highway Traffic Safety Administration had a plan to decrease the number of distracted drivers prone to accidents. Their goal was to create a test vehicle that could incorporate technology to help it to understand safety benefits. There would be sensors monitoring the roadway, nearby traffic, vehicle operation, a driver state could provide information to a system. Some prototypes have been created in 2007.

- Web site #2 Name: American Association of Motor Vehicle Administrators
- Web address: <http://www.aamva.org/GovAffairs/IssueWatch/DistractedDriving/>
- Summary of the information:
 - This article summarizes actions taken by the American Association of Motor Vehicle Administrators to attempt to find a solution to distracted drivers. AAMVA along with other groups such as American Association of State Highway Transportation Officials, AAA, American Highway Users Alliance, and the Governors Highway Safety Association sent a letter to Congress suggesting the dangers that distracted driving causes. They believed that the most critical component to finding a good method of resolution would require legislative action. They also came to the conclusion that other elements such as research, education, collection of data, and law enforcement are also mandatory to change the behaviors of everyday distracted drivers.

- Web site #3 Name: AMA: Fighting Distracted Driving
- Web address: http://www.spectrum-motorsports.com/news_article.asp?id=3648
- Summary of the information:
 - This article concluded that President Obama took action and banned federal workers from text-messaging on their cell phones while operating a government vehicle. President Obama believed that this would enforce the consequences as well as raise the awareness of distracted driving. The AMA itself, which is the American Motorcyclist Association, has adopted a statement that enhanced penalties for people who injure or kill others while operating a vehicle while they are distracted or inattentive. The goal of this statement is obviously to prevent the crashes from happening in the first place. The article also mentions a story about a man named Greg Zaffke II who started the Black Nail Brigade and the goal of his organization is to travel the country influencing people not to become distracted in the car by texting, painting fingernails, or eating a hamburger. He wants to make people more knowledgeable of his situation as well. He lost his mother to a distracted driver and this is why he is spreading awareness to other people. His mother was killed while being stopped at a red light on her motorcycle and a

distracted driver smashed into her from behind and wasn't clearly paying attention because she was painting her fingernails.

Conclusions:

I learned a lot about the seriousness of distractions and driving. I always thought that using a cell phone was the only issue but there are others as well. For example, just having other people in the car whether they are kids, your parents, or your friends causes a distraction. I also learned that people need to take distracted driving more seriously in order for a resolution to be found. If everyone works together and makes the effort of not becoming distracted on the road, then it definitely will be a better place. Until then, law enforcement is needed to crack down on these distracted drivers.

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