The Social Problem of Texting and Driving:

Analysis via Criminological and Public Health Lenses

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ABSTRACT

Previous research indicates that in general, college students recognize that texting and driving is a problem but continue to engage in this behavior. The current project builds on a content analysis of anti-smoking and pro-seat-belt use campaigns with an eye towards what makes such campaigns effective. From this, and a review of the literature, anti-texting and driving posters were developed. Feedback to the posters was solicited via a focus group interview at a small, liberal arts college in Southwest Virginia; subsequent edits were made to reflect what college students find to be most effective in preventing this behavior. This project was informed by the success of MADD, and both theories of deviance, and public health behavioral theories, to better understand the phenomenon of texting and driving.

INTRODUCTION

Technology is an ever-evolving field; thus, social scientific study of the impact technology has on our everyday lives remains a relevant topic worthy of analysis. A recent behavior made possible by technological advances is that of texting and driving. Although the dangers of texting and driving have been widely documented, this behavior remains commonplace, especially among young adults. A 2003 Harvard study analyzed the use of cell phones in the car and concluded that if cell phone use was eliminated while driving, there would be 2,300 fewer deaths and 330,000 fewer injuries annually (Cohen & Graham, p. 13). However, it was not until 2006, when a nineteen-year-old in Utah killed two rocket scientists in a car accident (a result of texting and driving), that lawmakers began to seriously consider regulating such behavior (Richtel, 2014 p. 25). The first texting and driving ban in the United States went into effect in Washington state in January of 2008 (Richtel, 2014 p. 189). The current project considers why people continue to engage in texting and driving, even when its dangers have been widely documented. From this, the current study attempts to develop effective advertising to prevent texting and driving behavior.

Taking an historical purview, it is useful to consider previous dangerous behaviors that, while once staples of American culture, have faded over time and have been largely eliminated. For example, historically, seatbelts were not widely used when they first became available in automobiles. It was not until 1984, thirty years after the modern seatbelt's invention that New York became the first state to require its use (CDC, 2015). And, in 1990, over a quarter of Americans smoked cigarettes regularly (CDC, 2001). However, by 2018, less than 15% of Americans were regular smokers (CDC, 2019). While eliminating the dangerous behaviors of non-compliance with seatbelts, and cigarette smoking, took time and research, eventually these behaviors were all but eliminated from our culture. A central aspect of both the pro-seatbelt and anti-smoking movements was effective advertising. It is not enough to make a commercial that simply says "wear your seatbelt" or "don't smoke"; advertisements, whether via poster, video,

audio, etc., must effectively grab the attention of their intended audience, cause people to think about harms associated with their behaviors, and ultimately, change their behaviors.

The most effective anti-smoking ad campaigns include the Tips From Former Smokers® campaign from the Centers for Disease Control and Prevention (CDC) and the truth® Initiative campaign. Ads stemming from these campaigns show the real and irreversible consequences of smoking, themes that are common among effective ad campaigns across a variety of topics. For example, the US Department of Transportation has a series of ads under the *Click It or Ticket* campaign, that, like the Tips® and truth® Initiative campaigns, emphasize the serious consequences of engaging in dangerous behavior. Rather than downplaying real and irreversible harms, effective advertising campaigns make such harms their centerpiece.

In addition to seat-belt non-compliance and smoking, drinking and driving is another issue that has plagued society and, in recent years, has decreased (Insurance Information Institute, 2021). Prior to the 1980s, it was relatively common for people to drink then drive; there was not nearly as much awareness of the dangers associated with this behavior as there are today. In the 1980s, two major movements permanently altered perceptions of drinking and driving in the United States. First, Mothers Against Drunk Driving (MADD) was founded in 1980 (MADD, 2020). Second, in 1988, Harvard's Center for Health Communication introduced the U.S. Designated Driver Campaign, designed to become part of the national approach to prevent injury and death caused by alcohol-related accidents (Center for Health Communication, 2020).

MADD has been referred to as one of the most successful grassroots organizations in the world for how it has changed the culture surrounding drunk driving (El-Gueably, 2005 p. 6), and can therefore serve as a model to tackle similar safety issues in society. The work accomplished by MADD illustrates that it is possible to significantly shift the attitudes people hold about certain behaviors, and from this, we have seen concrete shifts in behaviors which have served to benefit society as a whole.

The current project builds on prior analysis of the Tips® campaign, the truth® Initiative, and the national *Click It or Ticket* campaign (Wilk, n.d.). An analysis of MADD was conducted during the current project. The previous and current research was used to inform the development of an ad campaign against texting and driving. After a review of the literature and an analysis of previous, successful ad campaigns tackling smoking, seatbelt non-compliance, and drunk driving, a survey was sent to students at a college in Southwestern Virginia for clarity as to their attitudes and behaviors associated with texting and driving. The crux of the survey was a question which asked what, if anything, would keep respondents from engaging in texting and driving, or would at least reduce their engagement in this behavior. As to its theoretical grounding, this project was informed by the fields of public health studies and deviancy.

In the following sections, I begin with a review of the literature on texting and driving, a review of public health and deviancy theories, and a synopsis of an earlier project which informed the current one. I then explain my methodological approach, followed by a discussion of my findings and how they impacted the development of an anti-texting and driving ad campaign. I conclude with a brief discussion of future directions.

LITERATURE REVIEW

Texting and Driving

Text messaging is a common behavior today; this is especially the case for teenagers and young adults. In 2010, teens sent approximately 3,300 texts per month (Staff, 2010). This number has increased significantly in the subsequent decade; approximately 781 billion texts were sent in the United States in June of 2017 (Statistic Brain Research Institute). Even though texting is common —with many people finding texting more desirable than face-to-face conversation or phone calls —relatively speaking, it is a recent phenomenon. The world's first text message was sent in 1992, and eight years later, in 2000, the average number of text messages sent per month was only 35 messages per person (Erickson, 2012), a low number compared to today. While it took time for this behavior to catch on, these days, many people would be hard pressed to imagine life without it. There is now an entire generation of people who have grown up in a world where texting has always been a central part of daily life and culture. Despite the fact that texting is now ubiquitous, there remain gaps in the literature on texting and driving.

A Deadly Wandering (2014), by Matt Richtel, examines texting and driving from both a behavioral and legal standpoint. Richtel's book introduces the topic of texting and driving, as well as studies relating to brain activity and attention, to a lay audience. The book references world-renowned scientists, Dr. Adam Gazzaley, an attention scientist, Dr. David Strayer, a scientist who looks at the impact of technology on drivers, and Dr. Paul Atchley, a psychologist who studies and teaches cognitive neuroscience, and their research. (2014 p. 32, 109, 139). In addition to covering scientific studies, Richtel walks the reader through a car accident, caused by Reggie Shaw, and the subsequent legal battle over the first prosecuted case of texting and driving (2014).

Richtel highlighted a Princeton University study which used brain imaging to look at both monkeys and humans (2014 p. 121). From this research, experts were able to hypothesize that when engaging in two tasks at once, the execution of one of the tasks suffers while the individual directs more attention to the other task (Washington State University, n.d.). If this hypothesis is true (and there is much research to support it), that means texting while driving is one of the most dangerous behaviors a person can engage in. The driver may think they can pay attention to the road and their phone at the same time, but they will only be able to focus on their phone.

Dr. Strayer worked for GTE Laboratories in the early 1990s, and found that, based upon research into World War II pilots, a car phone was a troubling idea, at the very least (Richtel, 2014 p. 123-4). The first text message was not sent until 1992 (Erickson, 2012), so Dr. Strayer's findings were just looking at a phone with calling capabilities. If one person was so concerned about talking to someone on the phone while driving, why hasn't the same concern regarding texting been as prominent?

A Deadly Wandering also sheds light on the consequences of texting and driving by looking at the first prosecuted case of a texting and driving accident. Nineteen-year-old Reggie Shaw caused the death of two rocket scientists in Utah in 2006 (Richtel, 2014 p. 20). It was later determined that the cause of the accident was texting and driving, a behavior that was so second nature to Reggie, he did not remember he was texting at the time of the accident (Richtel, 2014 p. 91). This book references major studies into attention and the impact of technology on the brain, however, its central limitation is its failure to ask the following questions; how do we stop people from engaging in this clearly dangerous behavior?

Polls have shown 91% of adults know texting while driving is unsafe, yet 60% continue to use cell phones while driving, with 22% using their phones specifically to read and send text messages (The Harris Poll, 2011). Since the accident caused by Reggie Shaw, 46 states, and the District of Columbia, have passed laws against texting and driving (GHSA, 2021). The dangers are well-known, but people are still engaging in the behavior; what is needed to stop this behavior is bigger than laws alone. Former Executive Director of the Governors Highway Safety Association, Barbara Harsha, says that "enforcement of tough laws, plus heavy public education [...] 'are proven to work'" (Richtel, 2014 p. 282). The problem needs to be looked at from public health and deviance standpoints to understand how the most effective campaigns against the behavior can be developed. Prior research into anti-smoking ads has shown that, with the right types of advertising, behavior can, and will, change. Similar approaches should be applied to texting and driving so as to significantly reduce injuries and deaths that are a result of texting and driving.

Drinking and Driving, Designated Drivers, and MADD

Alcohol use is common in American culture, and there are individuals who consume alcohol and then engage in activities, such as driving, while in an impaired state. It is important to look at how the issue of drunk driving was tackled when studying texting and driving, because the two behaviors present similar levels of danger (University of Utah, 2006). According to Northwestern Medicine (the hospital network in Chicago that is associated with Northwestern University), it takes five minutes for alcohol to reach the brain and the effects of alcohol can be seen in as little as ten minutes (2020). Alcohol impairs the brain, affecting numerous functions such as vision and speech (Northwestern Medicine, 2020). Factors such as alcohol tolerance and weight impact the way people react to alcohol (National Institute on Alcohol Abuse and

Alcoholism, 2004), meaning that some people can consume more alcohol than others before they feel impaired.

The legal limit for blood alcohol content (BAC) is 0.08, and that amount of alcohol takes a little over five hours to leave your system (Northwestern Medicine, 2020). However, one may experience slight impairments in judgment and memory at BAC levels of 0.04 (Stanford Office of Alcohol Policy and Education, n.d.). Having a BAC of 0.08 means you have reached the legal limit and, if pulled over while driving, can be charged with driving under the influence (DUI). In fact, some jurisdictions have laws where individuals may still be charged with a DUI even before their BAC has reached 0.08 (HG Legal Resources, 2020).

Severe consequences can be meted out for those who drive after drinking, even if they are below the legal limit. According to the National Highway Traffic Safety Administration, "[i]n 2018, there were 1,878 people killed in alcohol-related crashes where drivers had lower alcohol levels (BACs of .01 to .07 g/dL)[1]" (n.d.). In that same year, sixteen percent of drivers involved in fatal crashes had a BAC below 0.08 (NHTSA, 2019 p.7). While that is below a quarter of all impaired drivers involved in fatal crashes, it still reflects that lives can be lost at any level of alcohol impairment. Those who drive while drunk (BAC of 0.08 and above), are more likely to cause fatal accidents. In 2018, over 50% of drivers involved in fatal crashes had a BAC at or above .08; the most common BAC level recorded during these crashes was .16 (NHTSA, 2019 p. 7), which is twice the legal limit.

The National Highway Traffic Safety Administration estimates that a third of all traffic deaths in the US are related to drunk driving and someone was killed in a drunk driving accident every 50 minutes in 2018 (n.d.). Those who choose to drive when drunk are 11 times more likely to die in a single vehicle car accident than those not driving under the influence (Northwestern Medicine, 2020). Unfortunately, these numbers only represent instances of drinking and driving that resulted in an accident or injury. Self-report surveys suggest that the number of people who drink and drive is much higher; not everyone who drinks and drives causes an accident or is detected by law enforcement. The CDC's annual self-report surveys show that, from 1993 to 2014, on average, approximately 130 million adults drove while under the influence of alcohol (CDC, 2020).

While alcohol-related accidents and resulting deaths still occur, the numbers are far lower than they once were. According to a 1988 report from the Bureau of Justice Statistics, an estimated 1.8 million arrests were made for those driving under the influence of alcohol and/or another substance in 1986 (Greenfeld). In 2018, arrest estimates from the FBI for drivers under the influence were 1,001,329 drivers (Insurance Information Institute, 2021). While the numbers are still in the millions, they have decreased by several hundred thousand. Today, there exists

[1] g/DL stands for grams per deciliter, which is another way of referring to BAC

significantly more awareness to this problem, as well as alternate transportation options (like Uber or having a designated driver) being commonly used.

Prior to the 1980s, society did not view drinking and driving as a problem needing immediate attention and the idea of using a designated driver was not commonplace. Mothers Against Drunk Driving (MADD) was founded in 1980 to advocate for drinking and driving laws. Later in the decade, in 1988, the Center for Health Communication at Harvard launched a campaign encouraging the use of designated drivers as a way to prevent alcohol-related accidents (Center for Health Communication, 2020). This campaign, along with the emergence of MADD earlier in the decade, dramatically shifted attitudes regarding drinking and driving in the United States and helped reduce the number of alcohol-related accidents.

MADD was founded in 1980 by Candance Lightner. Lightner's daughter, Cari, was killed at age 13 by a drunk driver who was a repeat offender for drinking and driving (MADD, 2020). Lightner started MADD as a way to change laws in California, but MADD transformed into a powerful, national advocacy group (MADD, 2020). While its grassroots organization structure and anti-drunk driving material has been crucial for its success, MADD's ability to tap into emotions in their campaigns has helped ensure the organization's continued prosperity and relevance (Schmidt, 2014 p. 241). To this day, MADD is still viewed as a highly successful organization that altered many common perceptions about drinking and driving.

In 1981, MADD found its place on the national stage when volunteers began picketing outside state capitols in an effort to have drunk driving laws passed (MADD, 2020). In 1982, the Presidential Commission on Drunk Driving was introduced by President Reagan, and MADD was part of this commission (MADD, 2020). This Commission helped solidify MADD as an agent for change and later that year significant legislation was passed to incentivize states to lower the legal BAC level from 0.15 to 0.10 (MADD, 2020).

In 1984, President Reagan raised the drinking age to 21 at the federal level; by 1988, all states had passed a 21-year minimum age. In October 2000, President Bill Clinton lowered the federal legal BAC limit from 0.10 to 0.08 where it remains today. By 2004, all states had adopted the 0.08 limit (MADD, 2020). MADD continues to provide services to those impacted by drunk driving and continues to launch campaigns and advocate for more laws against drunk driving. In 2013, thirty-three years after MADD was founded, there was a 55% drop in deaths as a result of drunk driving (MADD, 2020).

MADD has made a profound impact on drinking and driving; much of this impact is seen in the laws they have helped to pass. Additionally, MADD helped change the way society viewed drinking and driving. MADD has framed the issue of drunk driving not as an accident that can injure and kill people, but as a result of a choice the intoxicated driver made (Hamilton, 2000 p. 91). Helping society to view drunk driving as a decision rather than an accident that happens has helped to show how preventable drinking and driving is.

In addition to MADD, SADD (originally Students Against Driving Drunk, founded in 1981 and since 1997, Students Against Destructive Decisions), is an organization devoted to educating youth to be community leaders. SADD encourages youth to refrain from drugs and alcohol (SADD National, 2020). SADD promotes different initiatives including prevention and awareness for teen driver laws, seat belt use, impaired driving, distracted driving, and substance abuse of alcohol, drugs, and tobacco (SADD National, 2020).

There is documentation suggesting MADD used the term "designated driver" as early as 1986, but Harvard's campaign was paramount in having this term integrated into the mainstream. Harvard took advantage of popular culture to spread their message by working with writers who agreed to include messages about drunk driving prevention and designated drivers into the scripts of popular TV programs (Center for Health Communication, 2020). In addition to including the campaign's core message in popular TV shows, networks such as ABC, CBS, and NBC broadcast primetime public service announcements (PSAs) encouraging the use of designated drivers (Center for Health Communication, 2020). The use of such popular TV networks helped the campaign reach a wider audience.

The designated driver campaign also received endorsement from a variety of significant individuals and organizations, including President George Bush, President Bill Clinton, Surgeon General C. Everett Koop, the National Highway Traffic Safety Administration, the federal Center for Substance Abuse Prevention, MADD, professional sporting leagues, and state and local police departments (Center for Health Communication, 2020). As a result of this multi-pronged campaign, the term "designated driver" unheard of before the late 1980s, was included in *Random House Webster's College Dictionary* in 1991 (Center for Health Communication, 2020).

There is also numerical data to support the success of this campaign; in late 1988, when it was first launched, there were 23,626 alcohol-related traffic fatalities, annually. This number had decreased by 30% by 1994 (Center for Health Communication, 2020). This campaign and its introduction of the term "designated driver" to US society was deeply impactful, and in conjunction with MADD, helped bring about a greater awareness of the severity of drinking and driving.

In sum, organizations like MADD and SADD have recognized problems that plague society and have created powerful initiatives that have brought about real change. MADD and SADD have demonstrated the effectiveness of multi-pronged advertisement initiatives; it follows that similar initiatives can be created to address the issue of texting and driving.

Public Health

Public health as it relates to this project is the study of how campaigns can effectively change how society engages in potentially life-threatening behaviors. Public health looks at how

individual behaviors can impact entire communities; some behaviors can have devastating consequences for society as a whole (McKenzie et al., 2018 p. 6). Health communication and promotion via different forms of advertising is a way to spread public health messages to society. Campaigns can be created to address specific behaviors and sway the public in their view of such behaviors.

In 2014, Caird, Johnston, Willness, Asbridge, and Steel conducted a meta-analysis of texting and driving studies. They found texting while driving negatively impacts all safe driving behavior (2014 p. 315). Texting and driving applies to public health; even though it is a behavior individuals engage in, it threatens the overall health of the community because it can lead to accidents that cause property damage, injuries, and deaths.

Several factors are relevant when the health of a community is being examined. Important factors include physical, social, and cultural factors, community organization, and individual behaviors. Social factors are important to examine when studying any public health issue because it looks at interactions between people in a community. Social interactions between people can affect how a behavior, and how individuals that engage in a particular behavior, are viewed. This can, in turn, affect who starts to, continues to, or ceases to, engage in certain behaviors. Community organizing focuses on a community's ability to use its resources to address and solve problems. Individuals can create their own organizations, such as Candace Lightner founding MADD. Schools and colleges, along with local, state, and federal governments have also been known to create campaigns against certain behaviors (Harvard's Designated Driver campaign and the CDC's Tips® campaign). Individual behaviors are the behaviors individuals engage in that impact the overall health of a community (McKenzie et al., 2018 p. 6-9). This can include engaging in destructive behaviors, like texting and driving, or engaging with advocacy groups to prevent dangerous behaviors, such as getting involved with MADD. These are the most central factors in how this project addresses effective campaigns against texting and driving.

Over time, public health experts realized that there were ways to increase the overall health of a community that were not directly related to health care; the 1850s marked the beginning of the modern era of public health in the United States (McKenzie et al., 2018 p. 11). Effective campaigns, such as commercials or print ads are a big part of modern day public health, they are a way to get health-related messages out to the masses. Thinking of the issue of texting and driving, it is a lot easier to save a life by educating someone about the risks so they refrain from behavior, rather than trying to employ life saving measures for someone who was seriously injured in an accident caused by texting and driving. Campaigns aimed at education and prevention save lives.

The US Department of Transportation launched its nationwide *Click It or Ticket* campaign in 2003 (twenty-eight states had their own statewide campaigns beginning in 1993),

and the campaign is still continuing today (Tison & Williams, 2010 p. ii). This campaign has found that seatbelt usage was at 91% in the year 2019 and 15,000 lives were saved because of seatbelt use in the year 2017 (National Highway Traffic Safety Administration, n.d.). Those numbers alone reflect the widespread success of this public health campaign. The same general ideas and tactics from this campaign can be employed to launch a campaign against texting and driving.

Another successful public health campaign was the truth® Initiative. The idea behind this campaign was similar to the CDC's Tips® campaign, but the anti-smoking message was geared towards youth. Farrelly et al. looked at the truth® Initiative's impact on youth. Their research revealed that among the students in the study, smoking levels decreased from 25.3% to 18%, from 1999 to 2002. The truth® Initiative was responsible for approximately 22% of this decrease (2005 p. 425). These campaigns were both effective and show the importance of knowing your target audience and adapting the message to be as relevant as possible to that audience.

In public health, behavioral frameworks, like the Theory of Reasoned Action (TRA) are often employed in developing campaigns. TRA focuses on behavioral intention; the attitudes a person holds regarding a specific behavior helps determine if they will intentionally engage in that behavior. These attitudes are held by the individual but are shaped by the society they live in (Glanz et al., 2015). The idea that a person needs to have an intent to engage in a behavior means two things; one, a person's individual attitude about a behavior needs to change before the behavior will change, and two, the way society views the behavior must change, as well.

This theory highlights the significance of intention; and a campaign that is properly designed can change intention, and as a result, change behavior. According to Thomas W. Valente, the people you have relationships with, family, friends, coworkers, etc., influence health-related behaviors, both positive and negative (Glanz et al., 2015, Chapter 11 p. 25). It is not enough to change an individual's view of a behavior, the community must generally hold the same beliefs, because so much of what one does depends on the values of their community.

According to TRA, attitude is determined by the way one reacts to the thought of engaging in the behavior. If an individual thinks performing the behavior will lead to a positive outcome, they are more likely to engage, and vice versa if they think the behavior will lead to a negative outcome (Glanz et al., 2015). The way people react to an individual engaging in a behavior impacts their motivation to engage. Individuals have perceived norms associated with behaviors, and this is a direct reflection of how society views a behavior and those who engage in certain behaviors (Glanz et al., 2015). Significant relationships in one's life play an important role; an individual is less likely to engage in a behavior if those with whom they have valuable relationships disapprove of the behavior (Glanz et al., 2015). It is important to change the way entire communities view behaviors; without a negative view of a behavior from the community,

and those with whom the individual has significant relationships, individuals within the community will never make the attitude shift needed to change behavioral intention.

Intention is an important component of TRA, but that is not all that contributes to an individual engaging in a behavior. When a person has a strong intention to engage in a certain behavior, knows how to engage, is not seriously constrained by their environment, and has potentially engaged in the behavior previously, it is very likely they will engage in the behavior, and continue to do so. All of these factors are important to keep in mind when designing campaigns in attempts to change behavior (Glanz et al., 2015). A person's intention is composed of several categories, including attitude toward the behavior and perceived norms.

Previous public health campaigns have successfully shifted attitudes regarding certain behaviors. The CDC's Tips® campaign has enjoyed success since 2012; it has helped approximately one million people quit smoking (CDC, 2020). Smoking used to be culturally acceptable, and even encouraged. Not all individuals smoked, but the societal attitude favored smoking, which is why so many people engaged in the behavior. The Tips® campaign helped shift the societal attitude by using emotional, personal testimonies to show the true consequences of smoking (for both smokers and those exposed to second-hand smoke). MADD is another organization based on a public health issue that has shifted the societal attitude, which in turn, helps shift individual attitudes and change behavior. As previously mentioned, MADD has helped change laws and has contributed to a 55% drop in deaths caused by drunk driving (MADD, 2020).

Tips®, the truth® Initiative, and the Click It or Ticket campaigns, as well as efforts from MADD have shown success all across the United States. These organizations recognized behaviors that were causing public health problems and developed campaigns that helped change societal attitudes and individual behaviors. A nationwide anti-texting and driving campaign similar to these campaigns would likely enjoy similar levels of success.

Theories of Deviant Behavior

In Howard Becker's 1963 book, *Outsiders*, he sets forth several definitions of deviance. Ultimately, the definition of deviance that Becker arrives at, and the one which the current project adopts, is from a sociological perspective, "deviance as the infraction of some agreed-upon rule" (p. 8). That is, deviance is not a quality inherent in some actions, and not in others. Rather, deviance is a result of social processes indicating which behaviors are, and are not, deemed acceptable (Becker, 1963). Central to Becker's understanding of deviance is that the societal reaction to an act has a profound impact on whether it is viewed as an act of deviance or not; moreover, these reactions can change over time (Becker, 1963 p. 11-12). That is, a given action may be deemed normative at one point in time, and then its status may shift to non-normative over time as a result of social processes.

A prime example of this is cigarette smoking; in the 1990s, smoking was very typical (CDC 2001). Smoking was commonplace in public and in private; smoking was a normal part of popular culture, a staple of movies and a common theme of advertisements on television. Today, attitudes toward cigarette smoking have shifted dramatically. It is rare to see someone smoking in public; over time, smoking has become a stigmatized behavior, for reasons including the health dangers it poses to smokers and those exposed to secondhand smoke. The shift in how cigarette smoking is viewed demonstrates how people are swayed by societal attitudes. Cigarette smoking was recognized as a cause of lung cancer in the 1940s and 50s (Proctor, 2012 p. 87), but the societal attitude did not begin to shift until the 1990s. While the health problems caused by smoking were enough to make some people quit smoking, it was the the societal view which looked down upon smoking that was paramount in this major shift in attitude and behavior of smoking.

Similar to smoking, the dangers of texting and driving are clear. However, the stigma surrounding texting has not been established as it has been with smoking; moreover, there are differing levels of visibility associated with these two acts, which affects the power of stigma, shaming, and the likelihood that one is seen engaging in the behavior. It is important to note that social rules can lag behind the behaviors. There needs to be evidence that the behavior causes harm and people need to feel that something must be done to change the behavior (Becker, 1963 p. 162). Campaigns, such as the CDC's Tips® campaign and the *Click It Or Ticket* campaign have demonstrated that advertisements that show these harms can help shift attitudes and stigmatize dangerous behaviors. It is possible to change how a behavior is viewed, and in turn, this may impact the degree to which members of a society do or do not, engage in the behavior.

My Previous Research

In the spring of 2019, I conducted preliminary research which serves as the foundation for the current project.[2] The goal of the previous project was to understand the central characteristics of successful advertising campaigns aimed at curbing dangerous behaviors. Specifically, I focused on advertising campaigns aimed at seatbelt non-compliance and cigarette smoking. A focus group was held to gather attitudes about texting and driving from college students; those findings were used in the development of the survey questions of this project (Wilk, n.d.).

I conducted a content analysis of commercials that encouraged the use of seatbelts, and that discouraged the smoking of cigarettes. Sources consulted included TV commercials from the Tips From Former Smokers® campaign (Tips® for short), the truth® Initiative campaign, and the national *Click It or Ticket* campaign. All three campaigns had been running for multiple years and had demonstrated impacts on the behavior they related to, which is why these specific

[2] This project will be referenced at various times throughout this report as an unpublished manuscript with the parenthetical citation of (Wilk, n.d.)

campaigns were chosen for further examination.[3] The purpose of the content analyses was to find common elements amongst all campaigns. I watched each commercial multiple times and wrote summaries of each commercial as I viewed them. I dissected each commercial, and used a rubric to note various elements, such as what was said in the commercials, if text appeared on-screen and what it said, if the commercial featured a specific person, if that person made eye contact with the camera, if each commercial from the campaign followed the same format, any graphic elements (i.e. lung cancer, car accident scene), and other stylistic elements, such as music and cartoon-type graphics (Wilk, n.d.).

Common features of the Tips® commercials included frequent eye contact from the on-screen speaker, the telling of a personal and/or emotional story, and an explicit statement from each commercial where the speaker offered a "tip" (these tips related to the issues they face due to cigarette smoking, such as "clean out your speech valve twice a day") (CDC 2020). Within the truth® Initiative campaign, I analyzed commercials from the *Finish It* campaign; that portion of the campaign is targeted specifically at youth. Something common among all these commercials was their use of pop-culture references and other things that are associated with "youth" such as upbeat music and video-game style graphics. Each commercial offered a clear statement of a fact about smoking (Wilk, n.d.).

Finally, I looked at several commercials from the national *Click It or Ticket* campaign (there are statewide campaigns, as well). The major commonality here was that each commercial showed the real consequences of not wearing a seatbelt. Some were more dramatic than others (ending in a car crash and serious injury versus receiving a ticket), but the important thing is that they were all common consequences (Wilk, n.d.). There was nothing outrageous that a viewer could point to and say, "that's unrealistic.". One critique I had for these commercials was that, for younger audiences, some of the car-crash scenes may be too graphic (Wilk, n.d.). There are ways to show that an accident happened without necessarily showing a bloodied and injured body.

In my analysis, the most common theme revealed was that ads with a personal testimonial or a graphic component (the real consequences of smoking, for example) are more likely to be effective than ads without these components (Durkin et al., 2009) (Chung et al., 2016). This knowledge was crucial in the design process of the posters for the current project. I looked at the ads reviewed in my previous research, with the knowledge that they had elements that made them effective and applied that to create anti-texting and driving posters.

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[3] Individual commercials were chosen in the following ways: Tips® campaign, only commercials from former smokers, there were ten female commercials and eight male commercials, I chose three of each. For females, I chose every third commercial A to Z, and for males, I chose every other commercial, from Z to A. truth® Initiative campaign, I looked at the *Finish It* portion, which was geared towards younger generations, I chose six commercials (same number as Tips®), and hand selected those that were approximately thirty seconds long and were anti-smoking. *Click It or Ticket*, I looked at all the commercials available online, which was four total.

For my focus group, I recruited participants from the student body of a Southwestern Virginia college, using snowball sampling. I asked questions meant to reveal general attitudes college students held regarding texting and driving. I also asked students to share if they had any personal experience with car accidents caused by texting and driving or other forms of distracted driving. While not all students had personally been in an accident, everyone had a story of someone they knew getting in an accident or seeing someone doing an activity other than driving while behind the wheel (one student reported seeing someone folding laundry while driving) (Wilk, n.d.). I used this information to help build my survey questions for this project, and I utilized it in the development of the posters for this project.

THE CURRENT PROJECT

This project had two main goals: first, to review the literature on deviance and public health and situate the behavior of texting and driving in this context; second, to create anti-texting and driving posters whose designs are informed by college student attitudes solicited via survey and focus group research. Ultimately, I will distribute final versions of the anti-texting and driving advertisements to the community in the form of posters, magnets, and stickers, so as to spread awareness regarding the issue of texting and driving.

RESEARCH DESIGN & DATA COLLECTION

Developing the Project

This project utilized a mixed methods approach: in addition to a review of the literature, I employed both surveys and focus group interviews to collect data. Previous research allowed me to make informed hypotheses: I hypothesized that my survey respondents would indicate that college students do text and drive, and I hypothesized that my focus group respondents would indicate that the more realistic and graphic (graphic in the sense that the poster showed a real consequence, like a car accident scene) the advertisement, the more effective they believed it would be. I received IRB approval for both my survey and focus group research.

Survey Design

Survey questions dealt first with the texting and driving habits of Roanoke College students, and then asked respondents what it would take to change their behavior (that is, for those who reported that they took part in this behavior). The survey was distributed electronically to a sample of Roanoke College students. In total, 104 surveys were returned, with a response rate of 16.74%.

The survey can be found in the Appendix.[4]

[4] There was one complication with the survey, but after consulting a project advisor, we came to a solution so that the results were not compromised. Question 8 asked participants the following: “Have you ever texted while driving

Poster Designs

The focus group was shown five posters in total, Exhibits 1A, 1B, 1C, 2A, and 2B. Exhibits 1A, 1B, and 1C all had a similar design, and Exhibits 2A and 2B had a similar design.

A student employee with graphic design experience assisted me with the posters; she was compensated for her time.

The literature indicates that ads with a graphic component are more effective than ads without. This informed the design process: I settled on one design that was more graphic (a real image showing a real consequence of texting and driving) and one that was less graphic ("hand-drawn" style, and was not as explicit in showing the consequences of texting and driving) to see what the reactions would be and if college students would find something less graphic effective. The poster designs can be found in the Appendix.

Convening the Focus Group

In order to convene the focus group, I used the non-probability approach of snowball sampling. I contacted friends and invited them to take part; and I contacted a professor and asked her to recommend members of the freshmen class who might be interested in taking part. Nonetheless, I faced challenges recruiting participants; the focus group consisted of five students ranging from sophomore to senior, age 19-22. A student assistant was present to keep a list of the order in which participants spoke in order to ease transcription. The sample was not representative of the community of a Southwestern Virginia college, as snowball sampling was used.

After receiving approval to conduct my focus group over Zoom due to the Covid-19 pandemic, the focus group was recorded on a personal audio-recording device. From there, the conversation was transcribed, and major themes were noted.[5] An in-depth coding of the transcript was conducted and can be found in the Appendix.

DATA ANALYSIS & FINDINGS

The Survey

The survey was administered through the College's Office of Institutional Research to 621 students in Spring 2020. A week after the initial email was sent out, members of the sample

(at least once)?" If students answered "No" they were supposed to be directed to Question 10. However, everyone was directed to Question 9 ("How often do you text and drive? Occasionally; Not every time I drive; Usually at least once every time I drive; More than once every time I drive"). To remedy this, if a student answered "No" to Question 8 and "Occasionally, not every time I drive" to Question 9, their response was considered to be "No" to Question 8, and I analyzed the data as if they had been directed to Question 10, rather than Questions 8, 9, and 10, in that order.

[5] I utilized literature from Earl Babbie and Johnny Saldaña to assist in coding.

received a follow-up email, prompting them to take the survey if they had not already. The survey was open March 18-April 7; it received a total of 104 responses, for a response rate of 16.74%.

It is likely that the onset of the Covid-19 pandemic in March 2020 impacted the survey response rate: the week the survey was sent out, classes were cancelled, as all on-campus students were sent home. Thus, students may have been less likely to check their email, resulting in a relatively low response rate. In addition to the low response rate, I faced the following limitation: some survey questions were left blank by some respondents.

The age of respondents ranged from 18 to 23 with an average age of 20.15 years. All 104 respondents indicated that they had a cell phone; 101 reported that they had a driver's license.

The following question was posed: "Are you aware of the texting and driving laws in your home state?" and approximately 87% of respondents indicated that, yes, they were aware of the texting and driving laws in their home state.

17% of respondents who reported having a car on campus reported being unaware of the texting and driving laws in Virginia (this is reflected in Figure 1.0). 77% of respondents reported that they had texted while driving at least once in their life (see Figure 1.1); 62% said they only texted occasionally (not every time they drive).[6]

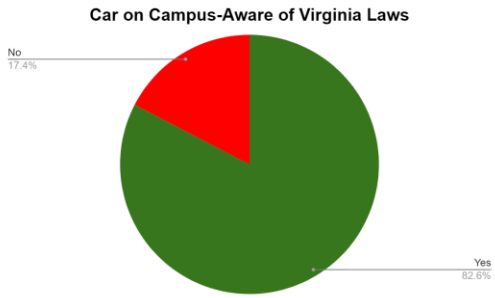

Figure 1.0

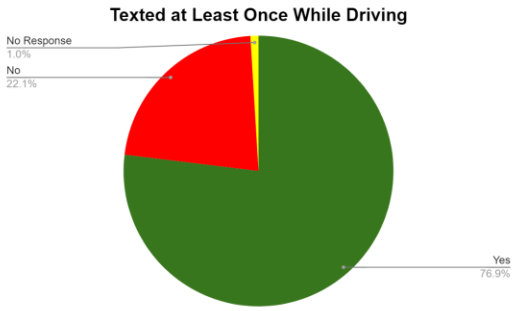

Figure 1.1

Out of 104 respondents, four did not believe that texting and driving was an issue among college students. Near the end of the survey, respondents were asked "What would help prevent/stop your current texting and driving behaviors?". Respondents were able to type their answer here, so they were able to indicate if the question did not apply to them because they did not text and drive. The top three responses (besides no response and saying they did not engage in the behavior at all) were: 1) Having a talk to text or another driving feature on their phone; 2)

[6] The options students could choose from were: "Occasionally, not every time I drive, Usually, at least once every time I drive, and More than once every time I drive". Students who answered "No" to the previous question "Have you ever texted while driving? (at least once) did not answer the question regarding how often they text and drive.

Leaving their phone in the glovebox/putting it on "do not disturb" or "off"/not looking at their phone; and, 3) Getting pulled over/getting in an accident/knowing someone who was pulled over or in an accident due to texting and driving. While the third response differed from those explicitly saying better education would help, I believe that response ties into better education and stronger anti-texting and driving campaigns. If you are unaware of the negative consequences a behavior can have, or how frequently such negative consequences occur, and to what degree, it does not make sense to stop engaging in the behavior. However, with better education and campaigns that show these real and devastating consequences, it is easier to change behavior.

Note: Tables of survey results can be found in the Appendix.

The Focus Group

The focus group for this project aimed to gather opinions as to the effectiveness of anti-texting and driving posters from college students. The target audience for the posters is college students, therefore it made sense to solicit their opinions. The poster designs were influenced by a review of the literature regarding effective advertising campaigns pertaining to anti-smoking and seatbelt use.

During transcription, respondents were assigned pseudonyms. Demographics of the sample were as follows: Gender: two males, three females; Class Standing: three seniors, one junior, one sophomore; Age: 19-22, with an average of 20.2.

I facilitated the focus group by first having everyone introduce themselves and I briefly explained the project and what would be happening during the focus group. I had five posters for which I was seeking feedback (reactions, positive or negative, suggestions for improvement), which I showed utilizing the "Share Screen" feature on Zoom. One poster was shared at a time and participants were given ample time to offer critiques, compliments, and suggestions.

Coding of the focus group transcript revealed three major themes regarding poster design and effectiveness: posters with more visual elements and complexity tended to be confusing to viewers, posters with more simplistic designs were more effective at displaying the anti-texting and driving message, and posters that displayed real consequences of texting and driving were considered more effective by those providing feedback in the focus group.

Theme three is in-line with prior research, such as that on the Tips® and *truth*® Initiative campaigns, and the U.S. Department of Transportation's *Click It or Ticket* campaign. This research had suggested that ads which show realistic consequences are more effective (Durkin et al. 2009) (Chung et al. 2016) (Wilk, n.d.); this puts confidence into the themes revealed in the focus group.

In addition to central themes identified, additional information was gleaned during the focus group: first, that of specific suggested changes to the poster designs, which helped inform subsequent edits and one new poster design. Second, respondents offered suggestions as to the physical locations about campus where posters would be most likely to be viewed.

The following chart shows representative quotes for each theme found during coding. A full chart of all quotes organized by theme can be found in the Appendix.

I. Poster Reactions

A. Positive

- "I like the detailedness of the art"
- "The simplest kind of hit that hardest"

B. Negative/Indifferent

- "This one's a little bit confusing on the concept"

II. Poster Suggestions

- "Things that show consequences work more"

III. Poster Placement

- "Yeah, generally like really any place that you're like forced to look"

DISCUSSION OF FINDINGS

The Survey

My original hypothesis was the following: "I believe that the survey results will reveal that students do text and drive"

This was supported by my survey results and I was able to gain additional information from the survey responses. I found that most students knew of the texting and driving laws in their home state. This was a positive finding, as I had personally expected to see more students unaware of the laws, but at the same time, does not mean everyone who knows the law refrains from engaging in the behavior. A study conducted by sociologist Neil Quisenberry found that out of 227 college students surveyed, 96% were aware that texting and driving was against the law, but continued to do it (2015 p. 303, 308). Clearly, laws alone are not enough to deter behavior; this speaks to the importance of education and effective campaigns alongside legal statutes.

The survey revealed that not all students with a car on campus knew the texting and driving laws in Virginia. While it was not a large percentage that were unaware, it was worth noting that students were driving a car (and potentially texting while driving) in a state where they did not know if there were legal repercussions.[7]

Another part of the survey asked why or why not students did not think texting and driving was an issue among college students and what they thought would change their behavior. The majority of students thought texting and driving was an issue, but there were a handful of respondents who did not think it was an issue. Three of the four responses shared the common theme that they did not think it was an issue because they had never seen a friend engage in the behavior. One respondent even went so far as to say "No, I think most people are smart and wouldn't do it." However, intelligence does not guarantee someone will refrain from engaging in a particular behavior.

The fourth response believed it was not a problem because they know people who are against texting and driving, as well as knowing people (themselves included) that only text when stopped at a red light. This particular individual focused on the fact that they only text when they are stopped, however, evidence suggests that even if you only text while stopped, your driving may still be impaired. Dr. David Strayer has testified to the fact that it can take fifteen seconds (or more depending on the conditions in which one is driving) after a text has been sent for a driver's attention to be fully back on the road (Richtel, 2014 p. 274). So, though drivers may pride themselves on only texting when their vehicle has stopped, they are still at a level of risk similar to someone texting while actively driving.

Students believed that texting and driving is an issue and there was a wide variety of responses in regard to what students thought would get them to change their behavior. One of the most popular responses was that better technology, such as talk to text, would help. Others thought that turning their phone off or keeping it out of reach would help them. Some respondents thought more education was needed. One response highlighted the fact that you see it in movies and television shows which glorifies the behavior; they believed if that stopped, less people would think the behavior was okay. When smoking was popular in the 1990s, movie characters could typically be seen with a cigarette; cigarette smoking is no longer common, and you do not see it in movies. A similar shift could happen with texting and driving.

Texting and driving is not necessarily glorified in popular culture, but there are instances where the consequences that come from texting and driving are not permanent, which is not always the case in real life. One example comes from the television series Glee, where one character is in an accident caused by texting and driving and loses her ability to walk. However, eventually she regains full mobility (Murphy & Brennan, 2009). While this shows a potential

[7] It is a primary offense to text and drive in Virginia as of January 1, 2021 (DRIVE SMART Virginia, 2020).

consequence of texting while driving, it fails to show the permanence and makes it seem that any injury can be overcome.

Some respondents said being pulled over and/or getting in an accident or knowing someone who experienced that would deter their behavior. While those responses differed from those explicitly saying better education would help, I believe that response ties into better education and stronger anti-texting and driving campaigns. If you are unaware of the negative consequences a behavior can have, or how frequently such negative consequences occur, and to what degree, it does not make sense to stop engaging in the behavior. However, with better education and campaigns that show these real and devastating consequences, it is easier to change behavior. There were a lot of other suggestions that did not overlap with other answers, and a full list of those responses can be found in the Appendix.

The Focus Group

My previous research and my own experiences as a college student allowed me to have confidence in my hypothesis. For the posters, I had the following hypothesis: "I believe that the students will favor the more graphic ads (graphic in the sense that it showed real life consequences) and find them to be more effective".

This hypothesis was supported by the focus group. I was also able to hear feedback relating to all the posters shown and was given suggestions for another effective poster design. I also received insight into where the best on-campus location would be to showcase my posters to optimize their effectiveness.

For Exhibits 1A-1C (see Appendix), there was an overall dislike of this poster design. There was mention that the artistry on the digital poster was nice, but the anti-texting and driving message seemed to be lost in the design. The message was unclear, the font did not seem fitting, and the photograph version had so much going on, it further deterred from an already unclear message.

The posters labeled as Exhibits 2A and 2B received much more positive feedback. I expected those to be favored more because the design was reminiscent of some of the *Click It or Ticket* commercials I had previously looked at. The message was much clearer, and the simplicity was more impactful. I was also offered a suggestion for a new poster design. (see Appendix for Exhibits 3A-3E).

Based upon my prior research, I can conclude Exhibits 2A and 2B, along with the newly designed Exhibits 3A-3E will be considered effective by those who view them. Previous research has shown that, generally, ads that displayed the graphic consequences of a behavior, were found to be highly effective at deterring that behavior (Durkin et al., 2009) (Chung et al., 2016) (Wilk,

n.d.). The Exhibits that have been chosen to become the print ads align with this previous research in terms of using content that is considered generally effective.

I also asked about effective poster locations on campus. Posters are used to advertise events, clubs, and course offerings. I wanted to know where students paid most attention to posters, since there are so many on campus. I found that students pay most attention when they are forced to look at the poster, such as a poster on a door you have to open or the back of a bathroom stall door. Additionally, I found that, though bulletin boards become cluttered, if a poster is big enough or colorful enough, students tend to notice it.

The focus group faced the limitation of small sample size. Despite this limitation, the focus group still offered valuable feedback as to poster design effectiveness.

Based upon the feedback received, Exhibits 2A and 2B will be used to make posters, magnets and stickers. The feedback led to a new design, Exhibits 3A-3E, which will also be used for printed materials. I plan to place posters on campus in areas where they will be seen, but not overlooked due to many posters in the same area.

Public Health

Existing literature that looked at effective anti-smoking and pro-seat belt campaigns, as well as an analysis of MADD, aligned with TRA. This theory, when applied to the current project, helped provide support for the idea that societal shifts in attitude needs to happen to change behavior. Effective campaigns can help create this societal shift and subsequent behavior change.

This phenomenon has been seen with cigarette smoking as previous research has shown. The ads I studied showed the real and devastating consequences of smoking; it affected enough individual attitudes that the overall societal view of smoking switched, and now the behavior is looked down upon. The creation of posters based on elements known to be effective in this project can help create a societal attitude change regarding texting and driving.

In addition to ad campaigns, communities can play an active role, too. Organizations such as MADD, and its youth-centered counterpart, SADD, can all play a part in addressing the issue of texting and driving. MADD was successful in bringing about new laws against drunk driving, and the same organizational model could be created for an anti-texting and driving organization.

People openly admit to texting and driving, even though they know there are laws against it, in addition to the potential for serious, long-lasting consequences. To many people, the legal consequences associated with texting and driving are not enough to stop the behavior. That is why campaigns that show irreversible consequences, such as deadly accidents, are what is needed to truly change behavior. A lot can be learned from the CDC's successful Tips® campaign and a similar model can be used to tackle texting and driving.

Theories of Deviant Behavior

As previously mentioned, acts are not inherently deviant, rather it is how people react to and label an act that brings about deviancy (Becker, 1963 p. 8). Texting and driving deviates from safe driving behaviors, but people who engage in the act do not usually label themselves as deviant or an unsafe driver, which is why they continue to engage in the behavior.

The effects of texting and driving are clear, it impairs driving to a significant degree, yet the behavior is not widely held as one that is deviant. One reason comes from the media. Texting and driving is seen in movies and TV shows, and this normalizes the behavior and can make people believe the consequences are not especially severe. Despite the known dangers, the behavior is not consistently labeled as deviant, which contributes to continued engagement in the behavior.

The posters created in this project can be used to help promote a negative label for the behavior of texting and driving. Once the behavior has a negative label associated with it, society will begin to implement rules against the behavior. These rules do not necessarily have to be part of the legal code; being labeled deviant by society can often influence one to change their behavior without ever having any legal repercussions.

It is not enough for individuals to view the behavior of texting and driving as wrong; society as a whole must view the behavior as wrong, and hold others accountable, making sure they refrain from the behavior.

Future Directions

Future research into this topic can be used to address the gaps that still exist in the literature. This can include looking at the impact of a wide-scale campaign, and using other forms of ads, such as TV commercials. Research can also be done to look at how certain technologies, such as talk to text impact driving; do the technologies meant to help drivers keep their eyes on the road actually keep drivers focused, or are they just as distracting as texting?

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APPENDICES

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APPENDIX I

Survey Questions:

1. How old are you?
    - 18
    - 19
    - 20
    - 21
    - 22
    - 23+
2. Do you have a cell phone?
    - Yes
    - No
3. Do you have a Driver's license?
    - Yes
    - No
4. What state are you from?
5. Are you aware of the texting and driving laws in your home state?
    - Yes
    - No
6. Do you have a car on campus?
    - Yes
    - No

7. Are you aware of the texting and driving laws in Virginia?
    - Yes
    - No

8. Have you ever texted while driving (at least once)?
    - Yes
    - No
9. How often do you text and drive?
    - Occasionally, not every time I drive
    - Usually at least once every time I drive
    - More than once every time I drive
10. What would help prevent/stop your current texting and driving behaviors?
11. Do you think texting and driving is an issue among college students? Briefly explain your answer.

Survey Data:

How old are you?	**Responses:**
18	**10**
19	**28**
20	**24**
21	**24**
22	**14**
23+	**4**

Do you have a cell phone?	**Responses:**
Yes	**104**
No	**0**

Do you have a Driver's License?	**Responses:**
Yes	**101**
No	**3**

What state are you from?	Responses:
Virginia	63
Other	41 total ● Maryland: 8 ● New Jersey: 7 ● Pennsylvania: 4 ● North Carolina: 4 ● Massachusetts: 3 ● New York: 2 ● South Carolina: 2 ● Missouri: 2 ● Florida: 1 ● Colorado: 1 ● Connecticut: 1 ● US Virgin Islands: 1 ● Louisiana: 1 ● Illinois: 1 ● Ohio: 1 ● New Hampshire: 1 ● Non-response: 1

Are you aware of the texting and driving laws in your home state?	Responses:
Yes	90
No	13
No Response	1

Do you have a car on campus?	Responses:
Yes	69
No	35

Are you aware of the texting and driving laws in VA?	**Responses:**
Yes, no car on campus	**15**
Yes, yes car on campus	**57**
No, yes car on campus	**12**
No, no car on campus	**20**

Have you ever texted while driving (at least once)?	**Responses:**
Yes	**80**
No	**23**
No response	**1**

How often do you text and drive?	**Responses: (from those who answered yes to “have you ever texted while driving?)**
Occasionally	**64**
Usually	**14**
More than once every time I drive	**2**

What would help prevent/stop your current texting and driving behaviors?	**Responses:**
No response	**27**
Talk to text/driving feature on phone	**15**
I don’t do it	**14**
Phone in glove box/do not disturb mode/don’t look at phone/phone off	**12**
Getting pulled over/getting in an	**7**

accident/knowing someone this happened to	
More education about the risks/more campaigns against it/stop glorifying it	**3**
If I didn't use my phone for music, I wouldn't use it to text in the car	**3**
If people didn't text me	**3**
If I had friends in the car to text for me	**3**
Harsher punishments	**2**
If I saw an accident/staged accident scene	**2**
Dying	**1**
Hearing about past deaths	**1**
If I tried to stop	**1**
If I realized I don't need to answer texts right away	**1**
If, when driving over a certain mph, my phone didn't work	**1**
If my phone sent an automated response	**1**
An app that paid me to not text	**1**
An app that blocked phone use in the car	**1**
A friend in the car telling me not to do it	**1**
Knowing if the text was urgent or not	**1**
Holder for my phone on the windshield	
If I had better self discipline	

Do you think texting and driving is an issue among college students?	**Responses:**
Yes	**91**
No	**4**
No response	**9**

APPENDIX II

Exhibit 1A

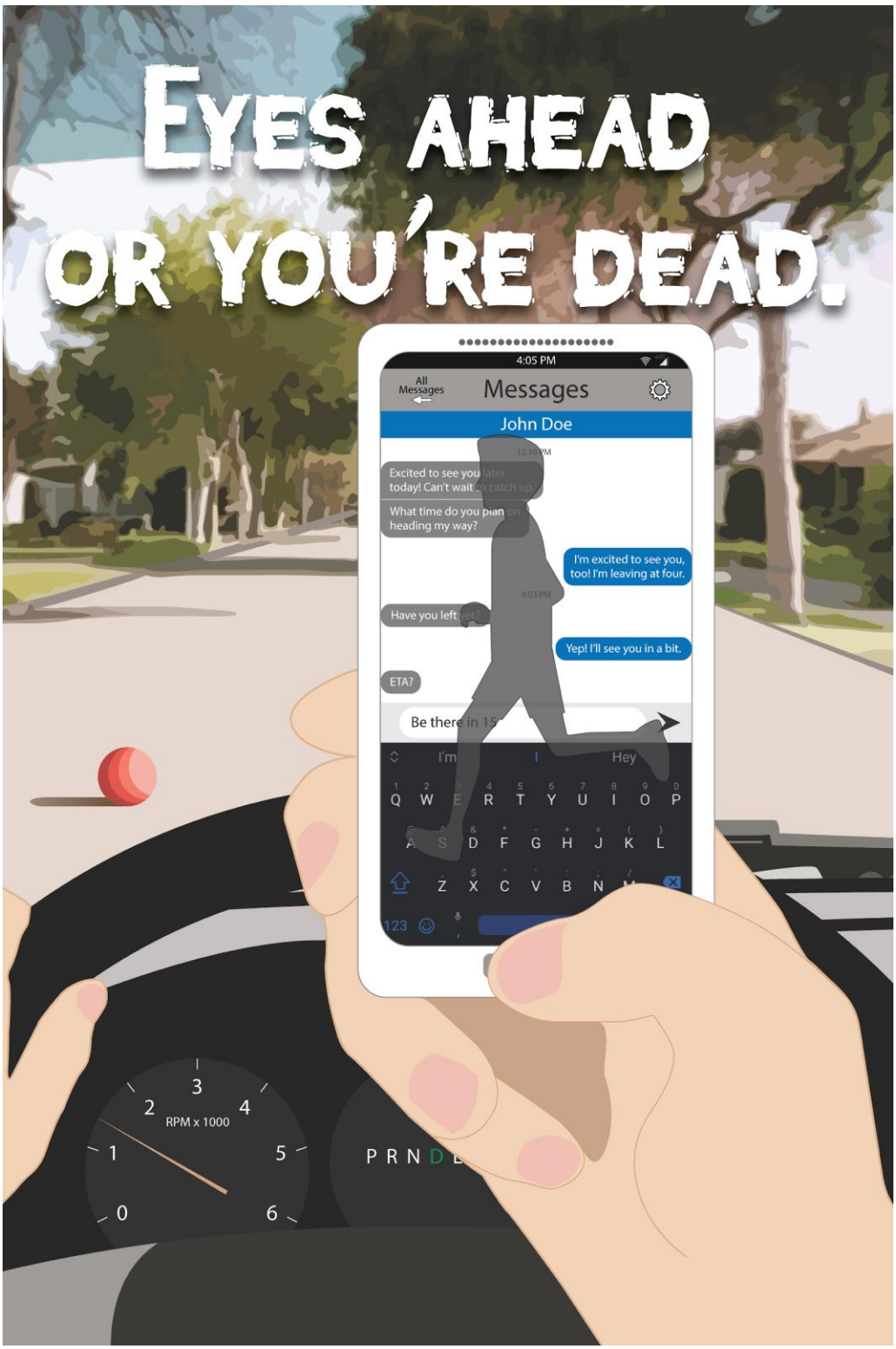


Exhibit 1B


EYES AHEAD OR YOU'RE DEAD.
Jamie Smith
Hey, where are you?
We're all waiting
There was traffic, I'm on my way
Enter message

Exhibit 1C

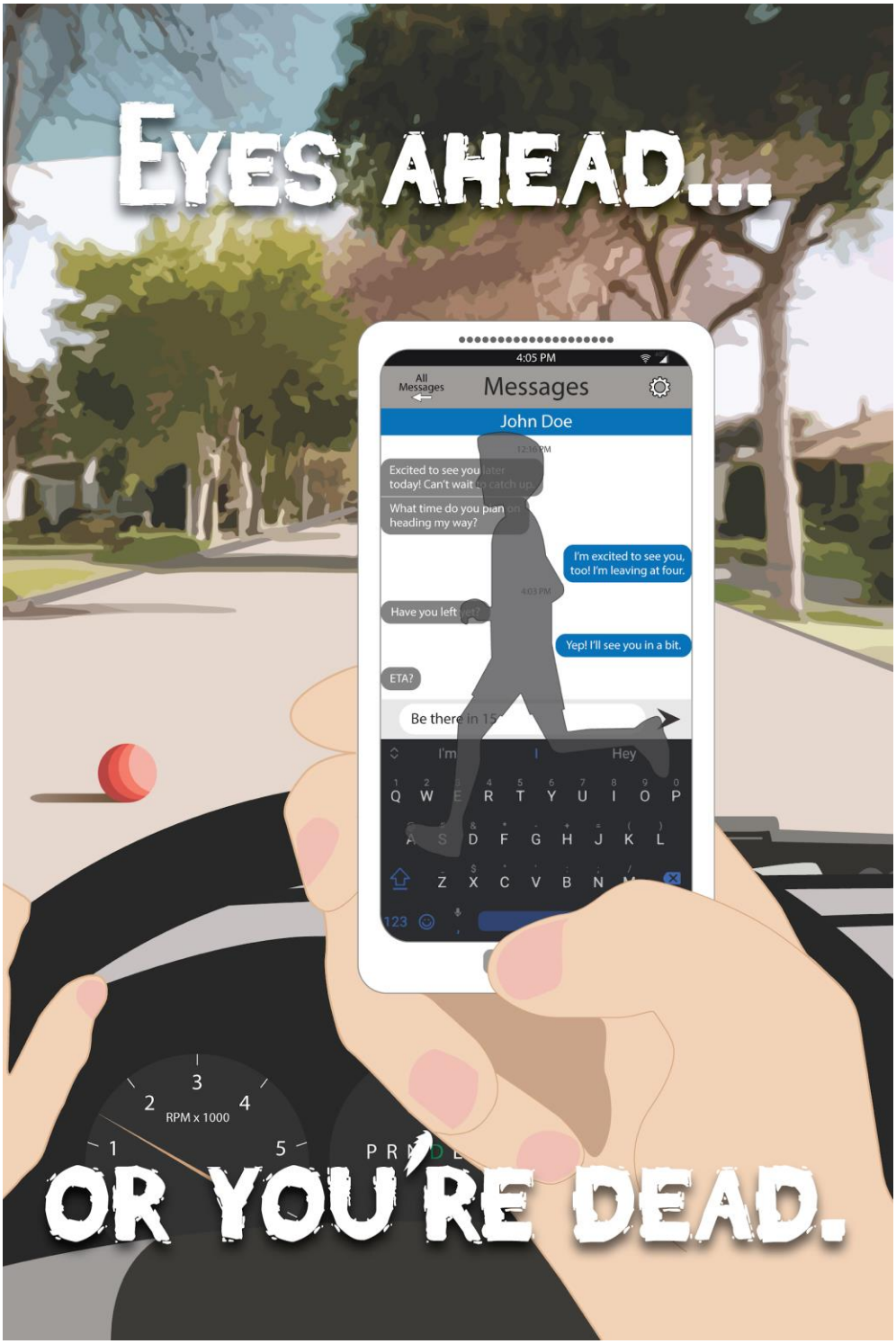

EYES AHEAD...
4:05 PM
All Messages
Messages
John Doe
Excited to see you today! Can't wait
What time do you plan heading my way?
I'm excited to see you, too! I'm leaving at four.
Have you left
Yep! I'll see you in a bit.
ETA?
Be there in 15
RPM x 1000
OR YOU'RE DEAD.

Exhibit 2A

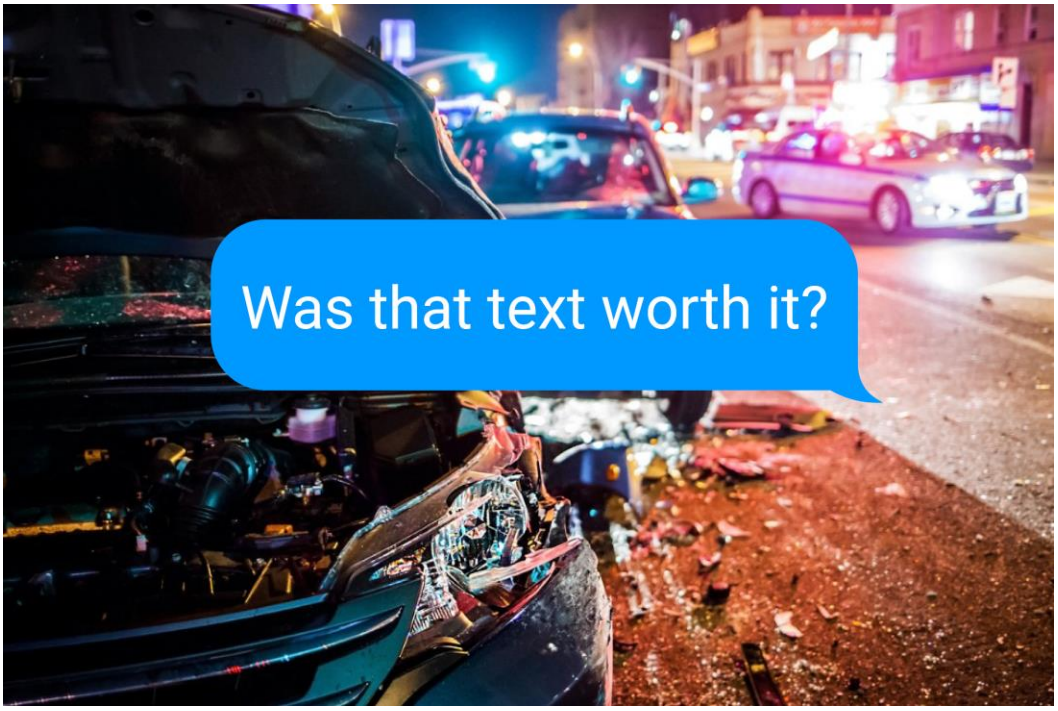


Exhibit 2B

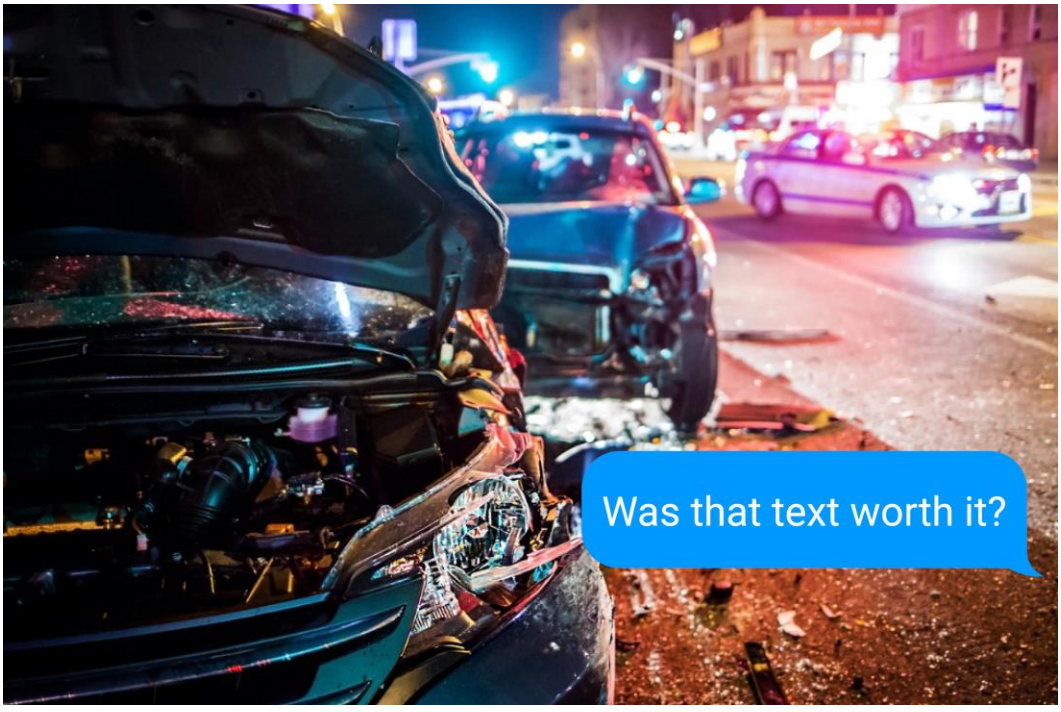


Exhibit 3A

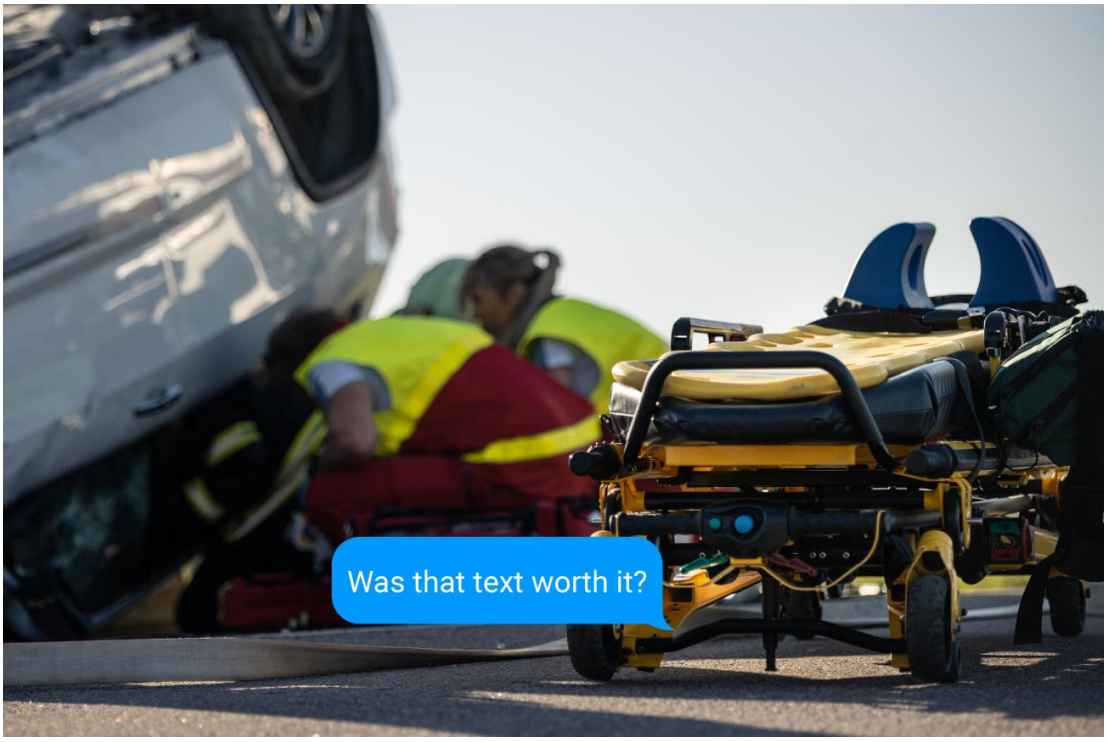


Exhibit 3B

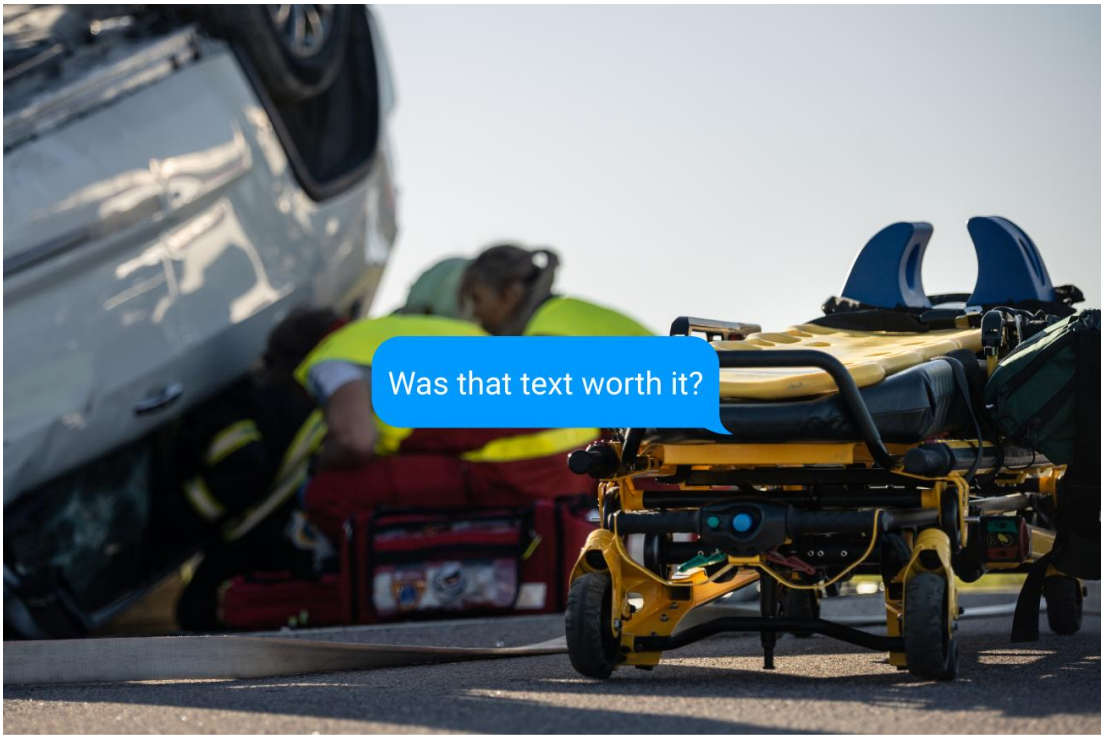


Exhibit 3C

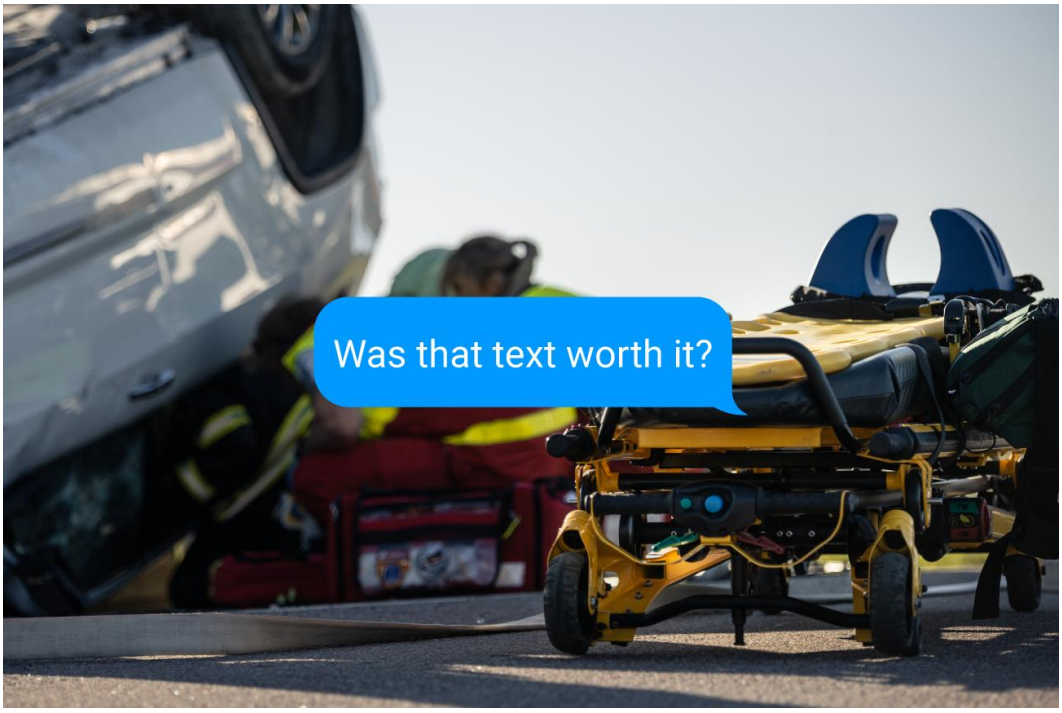


Exhibit 3D

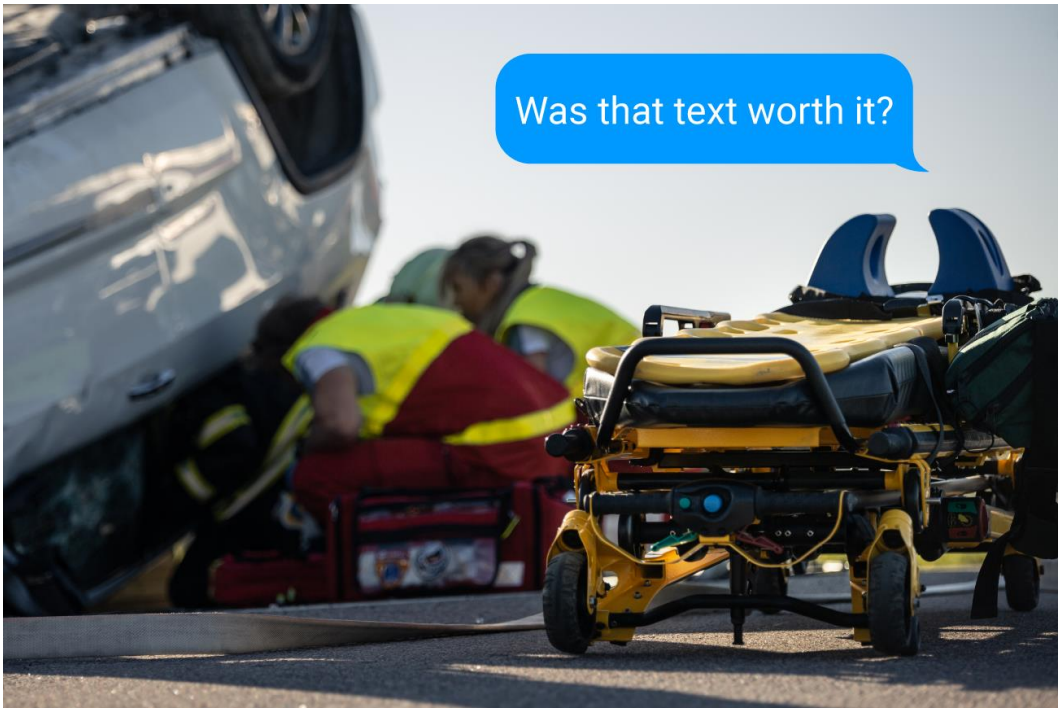
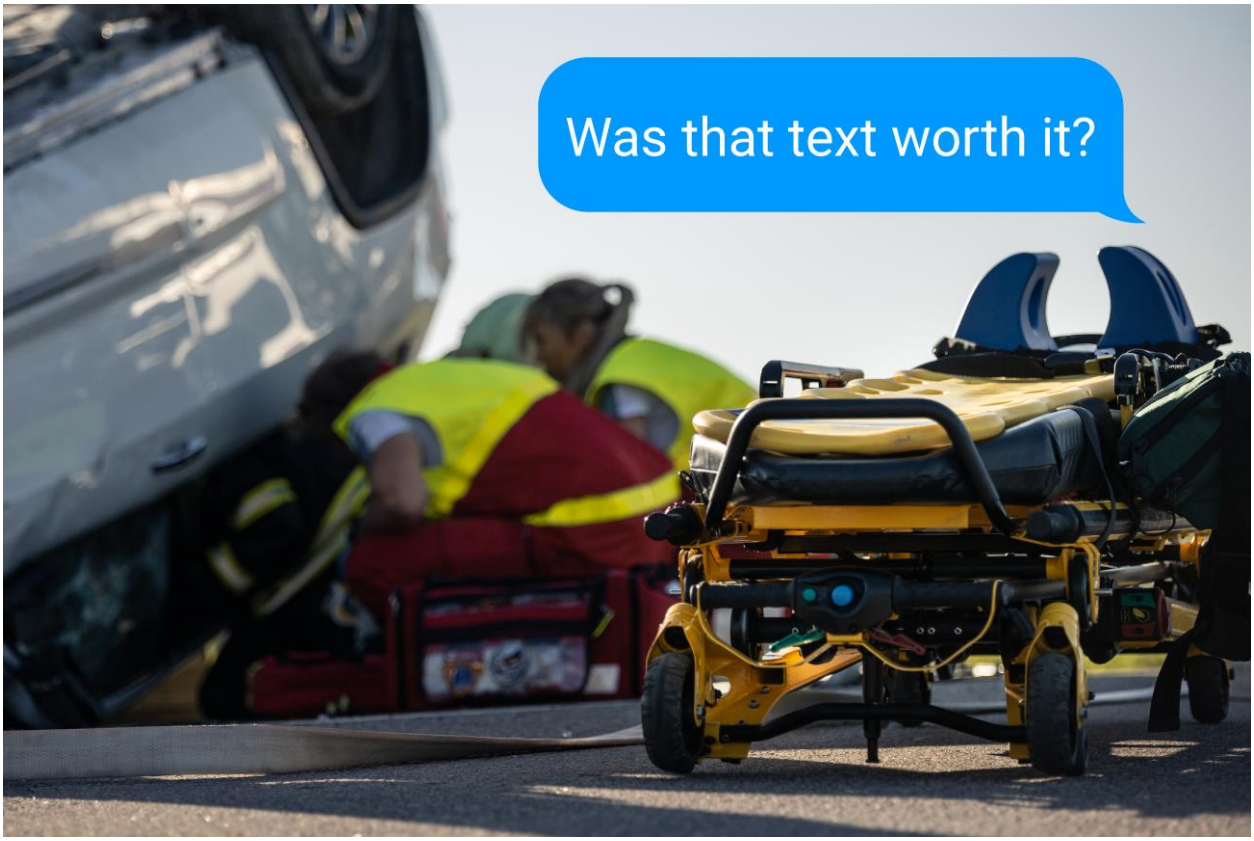


Exhibit 3E



APPENDIX III

Focus Group Themes by Category

I. Poster Reactions

A. Positive

7. I do like the rhyme scheme though, easy to remember

9. I appreciate it

16. I like the detailedness of the art

22. the art version for the last one that we saw was a lot more clear

29. I like the phrase broken up better

30. it has more of an impact

33. I personally like this one

34. the simplest kind of hit the hardest

35. I really like the concept of these kinds of like, awareness things

36. this one's like less, unintentionally funny

B. Negative/Indifferent

1. I find it slightly confusing

2. the messaging's a little, like (slight pause) confusing

3. I was thinking the same thing

4. they're trying to be serious, but it's like you don't really take it too seriously

5. it's like BLAH. Like (slight laugh)

6. being a little corny

8. I think the font ... I think it's a little harder to read

10. the texting at the top makes it like harder to see over cause like the eyes tracking there

11. I can't read the messages

12. I don't know if you're supposed to be able to

13. I agree with Chad that the font at the top

14. adds to the corny-ness

15. It looks like a Halloween movie poster

17. It actually makes me think more like, like that's not the imp-, like that's not the point

19. my immediate reaction is why is this man in the road and not paying attention?

20. it's a little bit less sympathetic than like killing a child

21. but seeing it superimposed over the, um, the, the what's obviously a photograph is a little si-in my mind, a little silly

23. there's like a lot more going on

24. the text being in the middle, that's the first thing I see

25. then I see the phone

26. then I see a random man in the street

27. this one's a little bit confusing on the concept

37. I can see it like obviously trying to channel into the effect that's it's actually coming, coming in like a text message

38. I think that gives us a lot of empty space there on the left and takes away from the weight of the message itself

39. the last one was more like BOOM, this one's like boom

2. Poster Suggestions

18. you could actually have just have like the colored text bubbles in there and it would almost be enough because we all recognize the color scheme enough to know like, okay, they're texting

28. Do you guys think it would be better to have like, like instead no text messages, but like a keyboard up and it just says messages at the top and just like the shadow of the child like on this but no text messages in the back?

31. it would be better if it was just the kid's shadow

32. a lot easier to focus on the actual message instead of trying to read the texts

40. I wonder if there's like some sort of a way to get like an ambulance in the back?

41. you don't want to get like, too graphic, not like a dead body, but like … something that would just like also imply that like there are people seriously injured

42. things that show the consequences work more

43. I think more things showing consequences are a better route to go. Especially for people our age.

3. Poster Placement

44. I tend to pay attention to the ones in the restrooms most of all.

45. yeah, generally like really any place that you're like forced to look.

46. like one that forces you to look on it, it's just like on a door

47. like in Colket and then also in dorms

48. I pay like the least attention to one on bulletin boards 'cause there's just like so many posters

49. if you get it like large enough or in enough color, um, I do pay most attention to the ones that are in the side door of Colket

50. something that's like a huge change, I notice it like every time I pass by it