Research Report

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College students and the need to text while driving

Introduction

Everyday people in the United States are surrounded by vehicles. They may be driving, riding in one, or walking beside one on the street. Vehicles are such a common occurrence that we rarely think about the dangers that come with them, and the distractions that are often occurring within that vehicle. One of the biggest distractions for driving is texting while driving. The use of cell phones has become an addiction and this use of cell phones is far more common than driving a car. This is a form of communication that has become a large distraction to individuals but specifically college students. College students have the constant urge to be texting while driving, just to stay connected to society and the world around them. In this research report, a study was done that examined the reason why college students feel the need to text while driving. The reason that was examined was that college students use texting in order to stay connected to society. They have developed an addiction to having that connection and if they do not have that source of texting, then they may feel as though they were missing out. In this research report we will be going through the different steps of the process that had to occur for the survey to be created, sent out, and finally the results from the data collected.

Rationale for Research Questions

In this first section we will be analyzing and synthesizing ten articles on the dangers of driving, forms of communication, and cell phone addiction among young people through the rationale for the research questions, and it will also show the specific question and hypothesis that will be studied.

The Dangers of Driving

For many people driving has become an everyday occurrence that we may think has few risks. With that in mind, however, we never know what dangers other people may bring onto the road. In this point, we are going to be analyzing and synthesizing three articles that each look at the dangers of driving, such as age, drugs, texting, and drinking. In the first two articles the authors found data by using surveys. The authors Cantor and Kingsbury pulled their information from the 2017 Ontario Student Health and Drug Use Survey, and authors Tzortzi and Kapetanstrataki used a questionnaire survey (Cantor & Kingsbury. 2021) (Tzortzi & Kapetanstrataki. 2021). The third article shows authors Fujiwara and Takechi collected data from fatal car accidents in Japan over the course of seven years (Fujiwara & Takechi. 2021). The main commonality between the articles was the impact that age has on driving, and the willingness to take risks. Then as drivers age, the risks of drunk driving continue to rise while their motor skills diminish. While researching the dangers of driving, the commonality that kept appearing was age, and this is an aspect that is not commonly talked about in society.

Forms of Communication

Do not be distracted while driving. This is an aspect that is constantly being told to drivers. However, with that, there have been studies done that have examined that simply having a phone next to you while driving can have an effect on your concentration. In the first article, authors Jamil and Tabassum did a study that followed the form of a questionnaire (Jamil & Tabassum. 2021). In the final two articles, authors Kurtz and Oehl and, in the second article, Chee and Irwin separate groups of people into specific conditions (Kurtz & Oehl. 2021) (Chee & Irwin. 2021). Each of these articles showed how both texting and calling can be a deterrent while

driving. This is even if the phone is not being held. Why is having a conversation on the phone more distracting than having a conversation with someone who is also in the vehicle? This is a question that the studies do not address but would be a good aspect to consider in future studies.

Cell Phone Addiction Among Young People

Cell phones have become a strong avenue of communication to stay connected with the people who are not directly in front of us. However, with this connection with those not around us, we have started to lose connection with the people who are around us. Authors Wang and Qian give an article that is similar to authors Lu and Ding; they are following characteristics that appear within the use of cell phones (Wang and Qian. 2021) (Lu and Ding. 2021). They see that the high use of cell phones can affect both your growth as a person and also being mindful of the people around you. In the next two articles we see authors Allred and Atkin, and the authors Amiri and Dowran study the effects of anxiety and loneliness that the use of cell phones can have on young people in our societies (Allred & Atkin. 2020) (Amiri & Dowran. 2020). The use of the word societies goes along with each of these four articles, as these articles are taken from different parts of the world. Having articles that have studied the concept of cell phone addiction around the world allows us to see that the effects of cell phone use is not just an occurrence in the United States. People think they are finding connection to others through cell phone use; while it can be beneficial for long distance relationships, it can cause those people to feel as if they do not have any friends nearby.

Application in Personal Study

Driving is something that we see or do every-day. We are told there are dangers and that we should always be cautious drivers. However, with driving you always have to have a high

level of trust with the other drivers that you will come in contact with. In my research study we will be examining the question "Why do college students feel the need to text while driving?"

With that we saw that earlier that simply making it illegal to text while driving will not make having a cell phone in the car any less distracting. As we saw, even using handheld devices can cause people to be distracted from driving. One aspect that was never addressed was the difference between having a conversation with someone over the phone and holding that conversation with a person in the same vehicle. The use of cell phones can lead to many benefits, but there are also aspects that have to be examined and considered. Cell phone addiction can cause anxiety and can affect a person's personal growth. Each of these aspects allow us to look deeper into the research question of why young people feel the need to use their cell phones to be connected to the world around them even while driving. The hypothesis for this research study is college students' text while driving because they feel the need to be connected to society through their phone.

Question

Why do college students feel the need to text while driving?

Hypothesis

College students text while driving because they feel the need to be connected to society through their phone.

Methods

When research is being conducted it is important to identify how it will be conducted and specific aspects of the research. The data for this research was done with snowball sampling and

that is a form of nonprobability sampling. Social media platforms were used to send out the survey to students at Grand Canyon University. I placed a link to the survey on my Instagram, and then I also sent the link to several friends who placed the link on their social media platforms. While this form of sampling can work well in some scenarios, it does come with great risk. The variety of people who are represented created a large margin of error because I used the results from the first set of people who filled out the survey.

The question being researched has one specific nominal variable that will be measured, and that is the fear of missing out. The fear of missing out is the observable response (Carmines, E. G., & Zeller A. R., 1979). In today's society, students in the age range of 18 – 22-years-old spend a considerable amount of time on their cell phones. When a notification appears on their phone, they feel the need to respond right away even when driving. The questions asked pertaining to this variable will be specific towards why students feel the need to be connected to society even when driving.

In this last point we are going to be examining the type of statistical procedure that was used to conduct this research. ANOVA testing was used as it is taking dependent variables and an independent variable. The independent variable is the question being asked: why do young people feel the need to have a connection to society while driving? The variable that was discussed in the previous point is a nominal variable.

Defining the way that a study is being done is important when writing and explaining how the research is going to be conducted. This allows for the specifics to be clearly laid out, and it shows both reliability and validity in how the study will be done. We saw in this section that

snowball sampling was used to survey students, that the way the study was measured is through a nominal variable, and lastly that ANOVA testing was the statistical procedure used.

Results

Demographic

In this section we are going to be looking at the results that were taken from the survey that was done at Grand Canyon University. There were four demographics that were examined, and they were age, what year the participant is in for college, what environment the participant grew up in, and what environment they currently live in. For the 43 participants, their age range showed 2% were under the age of 18, 91% were 18-22, and 7% were 23-32. The next demographic was what year they are in college: freshmen made up 30%, sophomores made up the largest amount at 44%, 23% were juniors, and then 2% were seniors. The third demographic was the environment they grew up in. Urban was at 12%, rural showed 30%, and the largest amount was suburban at 58%. The last demographic question asked where they currently live: rural was at 21%, suburban 30%, and urban was the highest at 49%. This last question would have a large margin of error because participants may have been confused on whether they should respond with where they live during the school year or where they live on break from school.

ANOVA Test Results

The way the data from this survey was analyzed was through an ANOVA test. From the data a composite measure was created by combining the data from three questions. The questions, do you feel the need to be always connected to society via your phone? Do you feel as

though you are missing out when you cannot text? And the last one is, are you confident at texting while driving? This was combined into the composite measure "Connected via Texting." This was run alongside the nominal variable what is your age? This test did show that the hypothesis is supported. College age students, in the age range 18 - 22, do feel confident texting while driving.

ANOVA Table

ConnectedViaTexting

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	335.820	2	167.910	9.883	<.001
Within Groups	679.601	40	16.990		
Total	1015.421	42			

Demographic Table

		What is your age?	What year are you in college?	What environment did you grow up in?	What environment do you currently live in?
Ν	Valid	43	43	43	43
	Missing	0	0	0	0
Mean		2.05	1.98	1.72	1.91
Media	an	2.00	2.00	1.00	2.00
Mode		2	2	1	2

Statistics

	society a big	society via	society while
	society a big	society via	society while
	connected to	connected to	connected to
	Is being	be always	more
		the need to	Do you feel
		Do you feel	
	2		

Missing	0	0	0
Mean	1.93	2.40	2.37
Median	2.00	2.00	2.00
Mode	2	2 ^a	2

a. Multiple modes exist. The smallest value is shown

Is being connected to society a big deal to you?

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly Agree	9	20.9	20.9	20.9
	Agree	29	67.4	67.4	88.4
	Disagree	4	9.3	9.3	97.7
	Strongly	1	2.3	2.3	100.0
	Disagree				
	Total	43	100.0	100.0	

Do you feel the need to be always connected to society via your phone?

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly Agree	5	11.6	11.6	11.6
	Agree	18	41.9	41.9	53.5
	Disagree	18	41.9	41.9	95.3
	Strongly	2	4.7	4.7	100.0
	Disagree				
	Total	43	100.0	100.0	

Do you feel more connected to society while texting?

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly Agree	4	9.3	9.3	9.3
	Agree	22	51.2	51.2	60.5
	Disagree	14	32.6	32.6	93.0
	Strongly	3	7.0	7.0	100.0
	Disagree				
	Total	43	100.0	100.0	

Discussion

In the rationale for the research questions there were ten articles analyzed that examined the dangers of driving, forms of communication, and cell phone addiction. These were examined to show what areas have been researched and how the survey that was conducted for this research report analyzed aspects that had yet to be studied. The dangers of driving showed how texting while driving is a danger and is often committed by young people. However, it failed to examine why young people feel the need to be texting while driving. This research report was able to examine that college students, in the age range 18-22, text while driving to stay connected to society. Forms of communication showed that, while texting is a large distraction for drivers, simply having a conversation with another person in the vehicle can also be a distraction. This is an aspect that will be further looked at in the section limitations and future research. The last section covered cell phone addiction among college students. The research done in this report showed that cell phone addiction is an aspect that often causes students to text while driving even when they know that is a distraction and it is dangerous. Out of the 43 participants only 33 filled out the open-ended question that asked to briefly explain why you think college students feel the need to text while driving? The common denominator between each response was the fear of missing out and as one response said "They (college students) treat texts as a bomb that might set off if they don't respond." This correlated with the results that were found in the quantitative research that showed 60% of participants feel as though they are missing out when they cannot text, and 88% said that being connected to society is a big deal to them. Another interesting aspect was that only 28% feel confident at texting while driving, 88% responded that it bothers them when other people text while driving, and 90% feel unsafe when their driver is texting while driving.

Limitations and Future Research

This study had several limitations and areas that could be fixed or added into the study in future research studies. The first area that was a limitation was the type of sampling. The type of sampling that was used was snowball sampling which is a form of nonprobability sampling. This form of sampling leaves much room for error because it is only taking the first people who respond to the survey. The sample group was also small as it was only forty students out of the twenty-five thousand who attend Grand Canyon University. In the future, a larger sampling group should be used in order to receive more credible results. For future studies the way that sampling was done through nonprobability could be changed to allow for more credible results. More credible results could examine a more diverse group of students when it comes to what environment they grew up in and where they currently live. This was a question that was asked but it is difficult to have a diverse group through nonprobability sampling. In the rationale for the research questions forms of communication were examined. An aspect of that section that would be good to do further research on would be how simple communication such as a conversation with other individuals in the vehicle can be a distraction to the driver.

Conclusion

Simply driving a vehicle has its many dangers. However, as we have seen in this research report, texting while driving is a danger that many college students are willing to commit in order to stay connected to their world. The research that was conducted analyzed the question of why do college students feel the need to text while driving? The hypothesis was college students text while driving because they feel the need to be connected to society through their phone. The hypothesis was proven accurate that the students in the age range 18 - 22 feel a strong

connection to their cell phones which causes them to text while driving. After this research was conducted there were many questions that were exposed that would be beneficial to do further study on, such as why simple communication, such as a conversation, is a distraction for the driver. The research done clearly showed that the answer to the question studied is that college students are addicted to knowing and being connected to society.

References

- Allred, R. J., & Atkin, D. (2020). Cell Phone Addiction, Anxiety, and Willingness to Communicate in Face-to-Face Encounters. *Communication Reports*, *33*(3), 95–106.
- Amiri, M., Dowran, B., Salimi, H., & Zarghami M.H. (2020). The problematic use of mobile phone and mental health: A review study in Iran. *Journal of Education and Health Promotion*, 9(1), 290. https://doi-org.lopes.idm.oclc.org/10.4103/jehp.jehp_268_20
- Cantor, N., Kingsbury, M., Hamilton, H. A., Wild, T. C., Owusu-Bempah, A., & Colman, I. (2021). Correlates of driving after cannabis use in high school students. *Preventive Medicine*, *150*. https://doi-org.lopes.idm.oclc.org/10.1016/j.ypmed.2021.106667
- Carmines, E. G., & Zeller A. R. (1979). *Little Green Book*. SAGE Research Methods. https://dx.doi.org/10.4135/9781412985642.n1.
- Chee, P., Irwin, J., Bennett, J. M., & Carrigan, A. J. (2021). The mere presence of a mobile phone: Does it influence driving performance? *Accident Analysis & Prevention*, *159*, N.PAG. https://doi-org.lopes.idm.oclc.org/10.1016/j.aap.2021.106226
- Fujiwara, T., & Takechi, K. (2021). Drinking, texting, ageing, or youth: which attribute is the riskiest for driving? APPLIED ECONOMICS LETTERS. https://doi-org.lopes.idm.oclc.org/10.1080/13504851.2021.1983128
- Jamil, A., Tabassum, S., Younis, M. W., Khan, A. H., Rehman, Z. ur, & Sanaullah, I. (2021).

- Analytical study to find the impacts of using a mobile phone on driver's inattentions while driving A case study of Lahore. *Accident Analysis & Prevention*, *157*, N.PAG. https://doi-org.lopes.idm.oclc.org/10.1016/j.aap.2021.106132
- Kurtz, M., Oehl, M., & Sutter. C. (2021). "Just One Short Voice Message"—Comparing the

 Effects of Text- vs. Voice-Based Answering to Text Messages via Smartphone on Young

 Drivers' Driving Performances. *Safety*, 7(57), 57. https://doiorg.lopes.idm.oclc.org/10.3390/safety7030057
- Lu, G.-L., Ding, Y.-M., Zhang, Y.-M., Huang, H.-T., Liang, Y.-P., & Chen, C.-R. (2021). The correlation between mobile phone addiction and coping style among Chinese adolescents: a meta-analysis. *Child & Adolescent Psychiatry & Mental Health*, *15*(1), 1–11. https://doi-org.lopes.idm.oclc.org/10.1186/s13034-021-00413-2
- Tzortzi, A., Kapetanstrataki, M., Evangelopoulou, V., & Behrakis P. (2021). Driving Behavior

 That Limits Concentration: A Nationwide Survey in Greece. *International Journal of Environmental Research and Public Health*, 18(4104), 4104. https://doiorg.lopes.idm.oclc.org/10.3390/ijerph18084104
- Wang, W., Qian, Y., Wang, Y., & Zhang, Y. (2021). Mindfulness and cell phone dependence:

 The mediating role of social adaptation. *Social Behavior & Personality: An International Journal*, 49(10), 1–7. https://doi-org.lopes.idm.oclc.org/10.2224/sbp.9363