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# Exposure To Mortality And Its Effects On Teen Drinking

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Exposure to Mortality and Its Effects on Teen Drinking

being

A Field Study Presented to the Graduate Faculty  
of the Fort Hays State University in  
Partial Fulfillment of the Requirements for  
the Degree of Education Specialist

by

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## Abstract

The topic of teen drinking is popular because it has been persistent over time and does not appear to be diminishing in today's society. Alcohol consumption among adolescents is a major health concern for our adolescents today (Kosterman, Hawkins, Guo, Catalon, & Abbott, 2000). Besides being associated with poor health conditions (Puddey, Rakic, Dimmitt, & Beilin, 1999), adolescent drinking is also correlated with risks such as poor school performance, violence/criminal behavior, and other self-harming behaviors (Mason & Windle, 2002). Aside from these alcohol related risks, there is a higher risk of poor decision making including that of drinking and driving. The current study attempted to determine the relationship among exposure to the negative effects of alcohol, specifically, death as a result of alcohol consumption and driving, and (1) the teen's participation in alcohol consumption post exposure and (2) the teen's participation in driving after consuming alcohol post exposure to these negative effects.

The current study suggests that knowing someone who has been killed in a drunk-driving accident and the participants' own reported alcohol consumption is not significantly related, however, knowing someone who has been killed in a drunk driving accident is significantly related to the participants' own drunk driving behaviors, with those reporting higher levels of drunk driving being those who knew someone killed in a drunk driving accident.

The study also indicates that the rated level of closeness to the person the participant knew who had been killed in a drunk driving accident was not significantly related to their own alcohol consumption nor their own drunk driving behaviors.

Although the data doesn't show a level of significance between rated closeness to the person the participant knew who had died in a drunk-driving accident and their own drinking and drunk-driving behaviors, data does indicate a trend toward social group behaviors. There were six participants who reported being "Very Close" to someone who had been killed in a drunk-driving accident. Those six participants reported a higher mean (tables 2 and 4) for both alcohol consumption in the past 30 days and also for driving under the influence of alcohol in the past 30 days. This trend is something that possibly relates back to social group actions (e.g. the peer group of the individual who was killed in a drunk-driving accident is more likely to participate in drinking and drunk-driving than those not in that same peer group).

The statistical power of the results indicating the peer groups (closeness) trends was compromised due to the small amount of participants (6 students) that fell within the group that rated being "very close" to someone who had been killed in a drunk-driving accident. This finding may have been found significant had there been more participants in this particular rating group.

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## Introduction

The topic of teen drinking is popular because it has been persistent over time and does not appear to be diminishing in today's society. Alcohol consumption among adolescents is a major health concern for our adolescents today (Kosterman et al., 2000). Besides being associated with poor health conditions (Puddey et al., 1999), adolescent drinking is also correlated with risks such as poor school performance, violence/criminal behavior, and other self-harming behaviors (Mason & Windle, 2002). Aside from these alcohol related risks, there is a higher risk of poor decision making including that of drinking and driving. The current study attempted to determine the relationship among exposure to the negative effects of alcohol, specifically, death as a result of alcohol consumption and driving, and (a) the teen's participation in alcohol consumption post exposure and (b) the teen's participation in driving after consuming alcohol post exposure to these negative effects .

### Adolescent Alcohol Consumption

Although we are more aware of contributions to the problem, adolescent drinking continues to be a problem facing our society. Research indicates that 73% of all high school seniors have consumed alcohol at some point; 67% over the past year, and 45% reported consuming alcohol in the past 30 days (Johnston, O'Malley, Bachman, & Schulenberg, 2008). The following are statistics from the SADD (Students Against Destructive Decisions) organization related to underage drinking.

1. In 2005, about 10.8 million persons ages 12-20 (28.2% of this age group) reported drinking alcohol in the past month. Nearly 7.2 million (18.8%) were binge drinkers, and 2.3 million (6.0%) were heavy drinkers (Johnston, O'Malley, Bachman, & Schulenberg, 2005).
2. Three out of every four students (75%) have consumed alcohol (more than just a few sips) by the end of high school (Johnston et al., 2005).
3. The rate of current alcohol use among youths ages 12-17 declined from 17.6% in 2004 to 16.5% in 2005. Youth binge drinking also declined during that period, from 11.1% to 9.9% (Johnston et al., 2005).
4. In 2005, more males than females ages 12-20 reported current alcohol use (28.9% vs. 27.5%), binge drinking (21.3% vs. 16.1%), and heavy drinking (7.6% vs. 4.3%) (Johnston et al., 2005).
5. Young adults ages 18-22 enrolled full-time in college were more likely than their peers not enrolled full time to use alcohol in the past month, to binge drink, and to drink heavily (Johnston et al., 2005).
6. About two fifths of students (41%) have consumed alcohol (more than just a few sips) by 8th grade (Johnston et al., 2005).
7. More than half (58%) of 12th graders report having been drunk at least once in their life. One fifth (20%) of 8th graders report having been drunk at least once in their life (Johnston et al., 2005).

8. Adults age 21 or older who had first used alcohol before age 21 were more likely than adults who had their first drink at age 21 or older to be classified with alcohol dependence or abuse (9.6% vs. 2.1%) (Johnston et al., 2005).
9. In 2005, 85.6% of youths ages 12-17 reported that they strongly or somewhat disapprove of peers having one or two drinks of an alcoholic beverage nearly every day (Johnston et al., 2005).

Although some of the statistics indicate a negative peer perception of alcohol consumption, there is evidence that underage drinking continues to be a problem. Some of the statistics reported above show that alcohol consumption among teens may be decreasing; however, there are still a number of adolescents participating in this type of behavior.

Many adolescents participate in alcohol-related activities on occasion because it gives them a sense of social acceptance and being a part of a “party” group is labeled as “cool” among today’s teens. Teen attitudes toward drinking remain a problem because of the idea of acceptance among society. Social acceptance plays a big part in a teen’s life, so if they can find a way to be part of a group, they seem to be willing to do what it takes, even if there are other negative consequences (Eaton, Kann, & Kinchen, 2006).

Alcohol use continues to be one of the most significant risk behaviors engaged by teens. “In that survey, 63.5% of tenth graders and 73.3% of twelfth graders reported drinking in the past year, with 39.0% and 49.8%, respectively, reporting alcohol use in

the past 30 days” (Johnston, O’Malley, & Bachman, 2002). This survey also reported that 21.9% of tenth graders and 32.7% of twelfth graders reported having been drunk in the past 30 days (Johnston et al., 2002). This research indicates that drinking is common among high school students; the research also indicated that teens ages 17 and 18 are more likely to engage in alcohol consumption than teens ages 14 to 16 (Ouellette, Gerrard, Gibbons, & Reis-Bergan, 1999).

### The Influence of Socio-Demographics and the Media

Socio-demographic and personality characteristics of adolescents play a big part in influencing individual decisions to engage in substance use (Petraitis, Flay, & Miller, 1995). A correlation between risk factors associated with adolescent substance use and demographic differences such as gender and age does appear to (Hawkins, Catalano, & Miller, 1992; Johnston, O’Malley, Bachman, & Schulenberg, 2006; Scheier, 2001). Males generally reported higher rates of alcohol use than females; national data indicates that the gender difference has decreased over time among adolescents approaching high school age (Wallace et al., 2003). Adolescents who are involved in criminal behaviors and those who are antisocial are more likely to partake in substance use (Farrell, Sullivan, Esposito, Meyer, & Valois, 2005; Mason & Windle, 2002); it has also been shown that academic success has an influence on reducing substance use involvement in adolescents (Bryant, Schulenberg, O’Malley, Bachman, & Johnston, 2003; Dryfoos, 1990; Fothergill & Ensminger, 2006).

Parental involvement and parental monitoring play a vital role in influencing adolescent's participation in substance use (Hawkins et al., 1992; Scaramella & Keyes, 2001). Parental supervision has been shown to reduce involvement with negative peer influences and in turn reduce the chances of adolescent substance use (Barnes, Hoffman, Welte, Farrell, & Dintcheff, 2006; Dishion, Capaldi, Spracklen, & Li, 1995; Duncan, Duncan, Biglan, & Ary, 1998). The adolescent's family norms and rules related to alcohol consumption are associated with teen drinking behavior (Klepp, Perry, & Jacobs, 1991; Kumpfer & Kaftarian, 2000; Van der Vorst, Engels, Meeus, & Dekovic, 2006). Also related to parental involvement and monitoring is that youth who indicate spending more time in unstructured activities or without parental supervision are more likely to engage in high risk behaviors including the use of alcohol (Osgood, Anderson, & Shaffer, 2005) than those youth who are involved in structured extracurricular activities (Borden, Donnermeyer, & Scheer, 2001).

Adolescents' perceptions of their peers' behaviors and attitudes as well as their interaction with these peers play a big part in influencing their own attitudes and behaviors related to substance use (Petraitis et al., 1995). Adolescents typically want to be accepted socially and may do whatever they feel is "socially appropriate" to do. The media is actually considered a prime source where adolescents get information about the use of alcohol (Grube, 2004; Grube & Wallack, 1994). Because many adolescents see drinking as socially accepted because of the portrayals in the media and in their immediate society, they are more likely to accept their peers' participation in

consumption as well. Exposure to alcohol intake in movies, television programs, and on the internet could influence adolescents' own beliefs about drinking and increase their chances of participating in such behaviors. Research indicates that identifying alcohol use as the "norm" can predict adolescents' own intentions to use (Olds, Thombs, & Tomasek, 2005). Portrayals of the acceptance of binge drinking and the negative consequences related to drinking also impacts youth in a way that indicates more acceptance on their behalf of these behaviors (Beck & Treiman, 1996). Adolescents are influenced by their parents' attitudes toward drinking; however, the most powerful influence is that of their peers' attitudes toward drinking and their perception of peers' participation in drinking.

Alcohol use is very common in today's media; in movies, reality television, and even the news, adolescents are frequently exposed to depictions related to the use of alcohol and related behaviors (Sargent, Wills, Stoolmiller, Gibson, & Gibbons, 2006). When adolescents perceive alcohol consumption as the norm, they bring that perceptual influence into their own social group and adolescents develop a more accepting attitude toward these types of behaviors among their peers. Not only is this type of "acceptance attitude" being portrayed in the media, adolescents frequently display alcohol references on social networking websites. Adolescents expose their own behavior on these social networking websites by posting photographs of themselves consuming alcohol or even describing their experiences with this type of behavior (Moreno, Parks, & Zimmerman, 2009). Adolescent's referencing of their own alcohol-related activities appear to be their attempt as being labeled "cool" by their peers. Although these references do carry

obvious risks, such as adults seeing these depictions and carrying out punishment related to the behaviors, adolescents do not seem to “filter” their social networking profiles from fear of the potential consequences. Youth attempt to promote referencing alcohol use on their own social networking profiles in order to include themselves in particular social groups that are accepted as “cool” because they drink or have parties (Moreno et al., 2009).

### Accessibility

Adolescents’ risk of engaging in substance use is influenced by the community that surrounds them. Many teens perceive their community as being an easy place to access alcohol and engage in alcohol-related behaviors. Lack of community involvement, high rates of substance use, and availability of alcohol within the community are all shown to have a damaging relationship with youth substance use and related behaviors (Bond, Toumbourou, Thomas, Catalano, & Patton, 2005; Jessor et al., 2003; Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995). Many teens may feel that acceptance of alcohol use among community members carries over into the adolescent population as well. Reducing the access to alcohol from adolescents may help with the issue of underage drinking. Also, implementing and reinforcing policies against such access may also help to reinforce the communities’ norms against teen alcohol consumption and against those who provide these adolescents with the alcohol (Grube & Nygaard, 2001).

There are disturbing statistics related to the accessibility of alcohol among youth. Jackson (2002) reported the following: two out of three teens say it is easy to get alcohol

from their homes without their parent's knowledge of doing so; one-third of teens say it is easy to obtain alcohol from their parents with their parents consent; two out of five teens say it is easy to obtain alcohol from a friend's parent; one in four teens report that they've attended a party where other teens were drinking in front of parents; teens reporting to have obtained alcohol in the past six months also reported that their parents were the supplier approximately three times in that six-month period. Reports of parental consent of adolescent alcohol consumption are one of the most damaging realities of the problem we're facing today with teen drinking; parents permit the destructive behavior. Adolescent attitudes toward alcohol use are impacted by parent attitude toward alcohol use, so if parents are consenting to this type of behavior, teens are more likely to be accepting of it among peers and their own behavior as well.

Data from Monitoring the Future (MTF) reports indicate that 93% of high school seniors report that alcohol is fairly easy or very easy to obtain (Johnston et al., 2008). Teens indicate that it is easy to obtain alcohol from businesses, however, the easiest source for alcohol are through adolescents' friends that are over the age of 21 that can legally purchase the alcohol themselves. Teens can also obtain alcohol at parties, whereas reported previously, can be provided by parents or other teens who have obtained their alcohol from another unreported source.

#### Designated Driver and Teen Impaired Driving

The idea behind designated driver programs is to select one individual from the group that is planning to go out and "party" who is not going to drink so that they can

drive the group home safely. The idea of a designated driver is a good idea for those wanting to participate in consuming alcohol so that they know they have a safe ride home, however, evidence shows that the idea isn't always "carried out". There are studies that have shown that many times, the designated driver who is selected to drive the group home isn't actually alcohol-free; rather, they are the person in the group who has supposedly drank the least amount of alcohol (even if that amount is still enough to cause them to be impaired) (Caudill, Harding, & Moore, 2000). There is also evidence that reports that those same individuals who serve as designated drivers are actually heavier drinkers and are more likely to report drinking and driving than those drinkers who do not volunteer as designated drivers (Caudill et al., 2000).

Many teens do not participate in designated driver programs or safe ride programs because they are afraid of the risk of being "ratted out" to authorities and dealing with those negative consequences. So, not only are adolescents participating in underage drinking, they are making poor decisions related to the alcohol consumption, one being impaired driving. Adolescents who have chosen to participate in the consumption of alcohol have also made poor decisions when it comes to their actions after consuming the alcohol. Drinking and driving is a problem not only in our adult society, but also for adolescents as well. The following are statistics from the SADD organization related to adolescent's impaired driving.

1. Motor vehicle crashes remain the number one cause of death among youth ages 15-20. There were 7,460 youth motor vehicle deaths in 2005. (This includes both drivers and passengers). (Perkins, Linkenbach, Lewis, & Neighbors, 2010).
2. Twenty-eight percent (28%) of 15- to 20-year-old drivers who were killed in motor vehicle crashes in 2005 had been drinking (Perkins et al., 2010).
3. For young drivers (15-20 years old), alcohol involvement is higher among males than among females. In 2005, 24% of the young male drivers involved in fatal crashes had been drinking at the time of the crash, compared with 12% of the young female drivers involved in fatal crashes (Perkins et al., 2010).
4. Drivers are less likely to use seat belts when they have been drinking. In 2005, 64% of the young drivers of passenger vehicles involved in fatal crashes who had been drinking were unrestrained. Of the young drivers who had been drinking and were killed in crashes, 74% were unrestrained (Perkins et al., 2010).
5. It is estimated that 24,560 lives have been saved by minimum drinking age laws since 1975 (Perkins et al., 2010).
6. In 2005, an estimated 906 lives were saved by minimum drinking age laws (Perkins et al., 2010).

7. During the last 30 days, 28.5% of high school students nationwide had ridden one or more times in a car or other vehicle driven by someone who had been drinking alcohol (Perkins et al., 2010).
8. In 2005, 39% of fatal crashes (all age groups) involved alcohol. The rate of alcohol involvement in fatal crashes is more than three times higher at night than during the day (59% vs. 18%) (Perkins et al., 2010).
9. In 2005, 30% of all fatal crashes (all age groups) during the week were alcohol-related, compared to 52% on weekends (Perkins et al., 2010).

The statistics related to drinking and driving among youth is alarming. In one study by Hingson (1993), it was estimated that alcohol was involved in nearly half of all fatal car crashes among adolescents (under the age of 21). In another study, it was also reported that 25% of high school seniors indicated that they had drove after consuming alcohol in the past two weeks, and another 40% reported that they had ridden with another driver that they were aware had been drinking (Bachman, Johnston, & O'Malley, 1987). These statistics may increase as the amount of driving increases, because there seems to be a likely correlation between the two; the more teens participate in driving (especially on the weekends) the greater their risk of driving while under the influence of alcohol. The risks of driving while under the influence of alcohol are numerous, and the risks seem to be greater for younger drivers. It has been reported that teens drink and

drive less than adults; however, they are more likely to crash when they do drive under the influence of alcohol (Bingham, Shope, Parow, & Raghunathan, 2009). “In particular, as blood alcohol a concentration increase, the risk of having an automobile accident increases at a faster rate in younger drivers than in older drivers” (Mayhew, Donelson, Beirness, & Simpson, 1986, p. 275).

“Approximately one third of deaths among persons aged 15-24 years are the result of motor-vehicle related crashes” (Escobedo, Chorba, Terence, & Waxweiler, 1995, p. 976). Drinking and driving rates among teens increased with the frequency of drinking participation and binge drinking (Escobedo et al., 1995). Teens are being exposed to alcohol consumption as well as poor decisions after consumption. There are many reasons why adolescents should not drink and maybe even more importantly, why they shouldn't drink and drive. Are teens learning anything from the deaths of those who are killed in alcohol-related accidents? Although alcohol consumption rates among teens has decreased over the years (as reported previously), it is still a problem we continue to face and one that will likely not go away any time soon.

## Teen Risk-Taking Behaviors

Health-risk behaviors among teens are a concern for our society across the United States. Numerous “risky” behaviors are included in the category of health-risk for teens, the following are behaviors that are consistently included in this category: tobacco and substance use, sexual activities, delinquency, depression/suicidal actions (Grunbaum, Kann, & Kinchen, 2002). The engagement of these risk taking behaviors such as smoking, alcohol consumption, violence, etc. contributes to morbidity and mortality among youth. According to national surveys such as the 2005 Youth Risk Behavior Survey, “26% of teens report binge drinking, 38% report marijuana use, 37% of sexually active teens report not using a condom at last sexual intercourse, and 19% report carrying a weapon in the past month” (Eaton et al., 2006, p. 54). These health risk behaviors are often implicated in motor accidents, and are actually reported as being the cause of 71% of all deaths among individuals age 10-24 years old (Eaton et al., 2006). Also related to these statistics, research indicates that risk-taking behaviors such as smoking and alcohol use that are initiated in adolescents are often linked to substance abuse later in adulthood and are associated with two leading causes of death in adulthood, cardiovascular disease and cancer (Riala, Hakko, & Isohanni, 2004). “Approximately 16% of 9<sup>th</sup>-12<sup>th</sup> graders engage in five or more risky behaviors” (Brener & Collins, 1998, p.537); hence the focus of the current study being aimed at teens within this age range.

Kelley, Schochet, and Landry (2004) reported that risk-taking and novelty-seeking characteristics of adolescents can be seen through their search for identity, belief in invincibility, desire for independence, curiosity, etc. and that these characteristics may modify the adolescents' perception of risk and understanding of the possible consequences of the risky behaviors. The study also indicated that adolescents are more likely to engage in these risk behaviors such as drinking and driving and ignoring accepted safety practices because they view these risk behaviors as exciting and even rewarding (Kelley et al., 2004).

Steinberg (2004) reports that efforts to provide adolescents with information about risks of substance use, reckless driving, and unprotected sex typically result in improvements in young people's thinking about these phenomena but seldom change their actual behavior. Steinberg suggests that recent research pertaining to the developmental neuroscience of adolescents and the recognition of the conventional decision-making framework "may not be the best way to think about adolescent risk-taking". Although adolescence tend to develop logical-reasoning abilities, nearly in full, by age 15, "psychosocial capacities that improve decision making and moderate risk-taking (such as impulse control, emotion regulation, delay of gratification, and resistance to peer influence) continue to mature well into young adulthood" (Steinberg, 2004). Due to neurological evidence suggesting delayed development of these rationalizing psychosocial capacities, it is reasonable to assume that although teens may understand the

dangers behind risk-taking behaviors, their lack of fully developed cognitive-control networks results in poor decision making. Steinberg (2004) also suggests that risk taking may be heightened in adolescence because teenagers spend so much more time with their peers, and “the mere presence of peers makes the rewarding aspects of risky situations more salient by activating the same circuitry by exposure to nonsocial rewards when individuals are alone”. David Elkind’s (1967) coined the term “personal fable” to describe the egocentrism seen in teens’ risky behaviors. The idea that they don’t think anything bad can happen to them allows them to ignore the possibility of their behavior’s negative effects.

## Summary

Research has shown that impaired driving among adolescents does increase the risks of motor-vehicle accidents due to the impact that blood alcohol level increases has on them. Various studies, as reported above, have shown that adolescents do continue to participate in alcohol-related activities even after being aware of the dangers it can cause. There are many studies that show the relationship between adolescents' participation in alcohol consumption and their poor decision making after consumption, as well as studies that show the amount of teens killed in relation to drunk-driving accidents. This study extends research on the two areas to determine if exposure to death related to drunk-driving has any effect on adolescents' participation in alcohol consumption after being exposed to such detrimental effects.

Analyses will be conducted to answer the following questions: (a) Are adolescents who have been exposed to death related to drunk-driving less likely to engage in alcohol-consumption themselves? Secondly, (b) Are adolescents who have been exposed to death related to drunk-driving less likely to participate in driving after consuming alcohol themselves? Analysis will be completed using questions from the 2010 National Survey on Drug Use and Health prepared by the Research Triangle Institute for Substance Abuse and Mental Health Services Administration (LeBaron & Dean, 2009). The portion of the questionnaire related to alcohol will be used for the

current study as well as questions incorporated to assess information on the participant's exposure to fatality related to alcohol consumption.

### Statement of Hypotheses

#### *Hypothesis One*

Adolescent exposure to death related to drunk-driving will not be significantly related to adolescent alcohol-consumption.

#### *Hypothesis Two*

Adolescent participation in driving after consuming alcohol will not be significantly related to adolescent exposure to death related to drunk-driving.

## Method

### Participants

Participants consisted of 68 high school students recruited from two southwest Kansas public high schools in Jetmore (Hodgeman County High School) and Ness City (Ness City High School). Before the beginning of the study, permission was obtained from the school principal (Appendix A). Of 203 parent consent forms (Appendix B) distributed, 68 were signed and returned to the school resulting in a 33% participation ratio. Twenty-seven of the participants were male (39.7%) and 41 were female (60.3%); participants ranged in age from 14 to 19. In terms of ethnicity, the sample was predominately Caucasian (83.8%). Other ethnicities represented were Hispanic (7.4%), Asian (1.5%), and African-American (2.9%); 4.4% of the participants indicated “Other” or chose not to respond to this question.

### Procedure

An active consent procedure was used for this study in order to ensure parent consent of the minor’s participation in the study. Parents and participants were assured of confidentiality of the information provided on the surveys (information reported would not specifically be tied to any individual student).

Participants were informed that their participation in the study was voluntary and that they could drop out of the research at any time. They were also advised that they would not receive any credit or other reward for their participation (Appendix C). In a

classroom setting, all students attending class on the day of “testing” who had returned a signed parent consent form and sign an assent to participate in research (Appendix D) completed one questionnaire which included demographic information as well as questions pertaining to the study (Appendix E).

The subjects were also informed that there was no right or wrong answers. They were asked to please answer the questions as honestly as possible, and were assured that the information they provided would be kept confidential. The researcher stayed in the room and was available to answer any questions that the participants had during testing. The average completion time for the study was approximately 10 minutes. When all participants were finished, they were thanked for their participation and debriefed (Appendix F).

### Materials

Participants were asked to complete a questionnaire containing both demographic information and information about alcohol consumption. Demographic information asked of the participants pertained only to age, grade, sex, and ethnicity.

Portions of the 2010 National Survey on Drug Use and Health were used to measure the participants’ drinking behaviors. Information regarding the participants’ exposure to mortality was also assessed using two questions: a) “Do you know someone who has died due to an accident related to drunk driving? And b) “What type of

relationship did you have with this individual? (With answer options such as very close, somewhat close, not very close.).

## Results

An independent samples t-test examined the difference between those who knew someone who had died in a drunk driving accident and those who had not in the number of times they themselves had consumed alcohol in the last 30 days. The results showed that there was no significant difference between the drinking behaviors of those who knew someone killed in a drunk driving accident and those who did not,  $t(66) = -.15$ ,  $p > .05$ . (See Table 1).

Table 1

Mean drinks in last 30 days by whether the participant knew someone who had died in a drunk-driving accident.

	M	SD	N
Knew Someone	3.84	3.80	50
Didn't Know Someone	4.00	3.88	18

An ANOVA was used to examine the difference between the three groups (levels of closeness: “Not Very Close”, “Somewhat Close”, and “Very Close”) who knew someone who had died in a drunk driving accident and their reported alcohol consumption in the last 30 days. The results showed that there was no significant difference between or within the three groups,  $F(2,48) = .94$ ,  $p > .05$ . (See Table 2).

Table 2  
 Mean drinks in last 30 days by rated closeness to person who died in drunk-driving accident.

	M	SD	N
Not Very Close	3.68	3.09	25
Somewhat Close	3.50	4.25	20
Very Close	5.83	4.67	6

An independent samples t-test was used to discover if there was a significant difference between those who knew someone who had died in a drunk driving accident and those who did not know someone who had died in a drunk driving accident in the number of times they themselves had driven under the influence of alcohol in the last 30 days. The results showed that those who knew someone killed in a drunk driving accident had themselves driven drunk significantly more times than those who did not know someone who had been killed in a drunk driving accident,  $t(44.92)=2.19, p<.05$ . (See Table 3).

Table 3  
Mean times driven under the influence of alcohol in last 30 days by whether the participant knew someone who had died in a drunk-driving accident.

	M	SD	N
Knew Someone	.53	.83	38
Didn't Know Someone	.15	.38	13

An ANOVA was run to discover if there was a significant difference between the three groups (levels of closeness: “Not Very Close”, “Somewhat Close”, and “Very Close”) who knew someone who had died in a drunk driving accident and in the number of times they themselves had driven under the influence of alcohol in the last 30 days. The results showed that there was no significant difference between or within the three groups,  $F(2,36)=2.76, p>.05$ . (See Table 4).

Table 4  
Mean times driven under the influence of alcohol in last 30 days by rated closeness to person who died in drunk-driving accident.

	M	SD	N
Not Very Close	.19	.40	16
Somewhat Close	.65	.10	17
Very Close	1.00	.89	6

## Discussion

The current study examined the relationship between adolescent exposure to death related to drunk-driving and their own drinking behaviors as well as the relationship between adolescent exposure to death and the teens' drinking and driving behaviors. Research indicates that teens participate in "risky" behaviors. Kelley et al., 2004 reported that risk-taking and novelty-seeking characteristics of adolescents can be seen through their search for identity, belief in invincibility, desire for independence, curiosity, etc. and that these characteristics may modify the adolescents' perception of risk and understanding of the possible consequences of the risky behaviors. The study also indicated that adolescents are more likely to engage in these risk behaviors such as drinking and driving and ignoring accepted safety practices because they view these risk behaviors as exciting and even rewarding (Kelley et al., 2004). The attempt of this study was to determine if exposure to mortality related to a specific type of risky behavior (drinking and driving) has a significant impact on teens' participation in that same particular risky behavior (one's own drinking & also drinking and driving behaviors).

The current study suggests that knowing someone who has been killed in a drunk-driving accident and the participants' own reported alcohol consumption is not significantly related, however, knowing someone who has been killed in a drunk driving accident is significantly related to the participants' own drunk driving behaviors, with those reporting higher levels of drunk driving being those who knew someone killed in a drunk driving accident.

The study also indicates that the rated level of closeness to the person the participant knew who had been killed in a drunk driving accident was not significantly related to their own alcohol consumption nor their own drunk driving behaviors.

Although the data doesn't show a level of significance between rated closeness to the person the participant knew who had died in a drunk-driving accident and their own drinking and drunk-driving behaviors, data does indicate a trend toward social group behaviors. There were six participants who reported being "Very Close" to someone who had been killed in a drunk-driving accident. Those six participants reported a higher mean (tables 2 and 4) for both alcohol consumption in the past 30 days and also for driving under the influence of alcohol in the past 30 days. This trend is something that possibly relates back to social group actions (e.g. the peer group of the individual who was killed in a drunk-driving accident is more likely to participate in drinking and drunk-driving than those not in that same peer group).

#### Limitations of the Study

The participants in this study may not have been reporting accurate information because they were asked to report on their own illegal behaviors. The fact that the surveys were completed at the school may also have affected accurate/honest reporting; students may not have felt comfortable reporting illegal behaviors in the school where the majority of those that work with them there are seen as authority figures. Again, although the students were informed of confidentiality, the presence of an authority figure may have influenced the student's responses.

A small number of subjects in some of the groups may have prevented statistical significance due to a simple lack of statistical power. This was particularly true when considering the small amount of participants (6 students) that fell within the group that rated being “very close” to someone who had been killed in a drunk-driving accident. This finding may have been found significant had there been more participants in this particular rating group.

#### Future Research

Replication studies are needed to validate/dispute the current findings. It would also be beneficial to compare these reported behaviors across a wide variety of settings in the United States. The fact that the students were participating in the current study at school may have negatively affected the reported data (not being honest due to fear/reminder of authority nearby).

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