

Alcohol Consumption and Levels of Violence

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Abstract

Around 13,000 students ranging from 6th to 12th grade from 22 different schools in the Kentucky region participated in the Kentucky Youth Survey. This survey consisted of a wide variety of questions including topics about alcohol, relationships, violence, etc. This particular study was to see if there was a supported hypothesis by testing if higher levels of alcohol consumed lead to higher levels of violence. One alcohol survey question was used to test alcohol consumption levels. An index was created using 8 different questions from the survey that related to violence. Age, sex, and race was used as a control variable. This hypothesis was supported at the bivariate and multivariate level.

Background

Alcohol and violence have both always been concerns among society—both being deviant in some cases. Both of these issues have caused many deaths, crimes, and destruction among society. When alcohol and violence are combined though, they are even more dangerous. According to the National Council of Alcohol and Drug Dependency, alcohol is involved in 40% of violent offences; 37% of people who have been convicted and are imprisoned say alcohol was involved in their crime (2015). Alcohol also has a big impact on violent crimes like rape, murder, assault, and child and spousal abuse (National Council of Alcohol and Drug Dependence, 2015). Drunk driving usually gets the most attention among alcohol related crimes and has a lot of laws to prevent it, but alcohol and violent crimes need to also be studied to help prevent it from happening as often in the future.

If alcohol and violent related crimes are so common, why are there not more groups and regulations to prevent this from happening? In the study linking alcohol use to higher levels of violence, the social bonding theory by Hirschi (1969) can explain this correlation. Social Bonding Theory is used to explain why people commit or do not commit crimes. This theory contains four different explanations for this; attachment to relationships or cultural standards, commitment to another group or activity that is a social norm, involvement in activities, and belief that all of these things are important (Biancur, 2014). The element of social bonding theory that explains the correlation of alcohol use to higher levels of violence is the involvement aspect. People can choose to associate themselves with positive acts and activities, or they can choose to associate themselves negatively and this leads to negative behavior and deviance.

In the present study, the Social Bonding theory by Hirschi (1969) will be examined and tested to show the correlation between alcohol use and higher levels of violence among individuals. Hirschi's theory of social bonding has been used to explain many deviant behaviors and crime-related behaviors. Although alcohol use and levels of violence have been tested by others, they have not, to my knowledge, been tested with the set of data that I will be using. The results of this study will show the important connection between alcohol use and violence, showing that it needs to be addressed just as much as drunk driving is addressed.

Literature Review

Introduction

Alcohol and violence can both be extremely dangerous to the human body. When put together they are even more dangerous to the human body. Alcohol can cause many health hazards when not consumed responsibly—it can especially affect the brain and cause damage to it. Violence also can cause a great deal of harm to a person's body—internally and externally.

Violence is usually learned at a young age and is influenced by one's peer group, and so is alcohol. Peer pressure has a big influence on violence and the use of alcohol. When alcohol is consumed it leads to higher levels of violent crimes. Alcohol use, most often times, leads to delinquency; which violence is part of. Social bonding theory by Hirschi explains this with his explanation of involvement in activities.

Alcohol Use

Alcohol can be a dangerous substance when used in the wrong types of ways. Alcohol consumption can cause many health related problems along with causing legal and ethical problems within a person's life. According to Li in 2010, alcohol is the cause of over 60 health problems and it is also 4% of the global burden of diseases. Alcohol has an effect on many parts of the body, this includes: cardiovascular system, the liver, the kidneys, and most importantly the brain. The brain is one of the most important organs in the human body—it controls so many functions that a human uses for everyday tasks. Without the brain, a human body would not be able to properly function and neither would any of the other organs. Alcohol is extremely influential on the cognitive functions of the brain and it causes (sometimes) extreme behavioral changes in people when consumed (Zheng, 2015). Alcohol can be detrimental to brain functions, especially when a person binge drinks frequently.

Binge drinking is defined as drinking a heavy amount of alcohol in one sitting and becoming intoxicated and it is followed by a period of moderation (Thayanukulvat, 2015). The age group that is most associated with binge drinking is young adults and older teenagers. These groups partake in binge-drinking the most frequently, which can cause severe damage to their cognitive functions in their brains and it can also lead to other health risks. According to the study that was done by Zheng in 2015, alcohol affects the basal ganglia and cerebellum—both

which are connected to body movement and cognition in the brain. Several other studies have been done over the past several years that show the amount of damage to the brain binge drinking causes; it causes humans to not be able to control their sensory motor systems, their decision making skills, and their memory (Zheng, 2015 & Thayanukulvat, 2015). Binge drinking is sometimes caused by peer pressure among a peer group. Peer groups are extremely influential to one another, especially in young adults and teenagers.

Peer pressure has a lot to do with what people see other's doing in groups around them. If people in the same peer group as themselves are binge drinking and using substances to cope with certain things in their lives, they are also influenced to start using them too (Varela, 2010). One study that was done on peer influence and alcohol showed that over half a million students each year are unintentionally harmed after the use of alcohol (Hingson RW, 2009). The study that was done by Varela in 2010, showed that people were more likely to drink alcohol if they were in the presence of someone else, and specifically if they were among their friends. Since humans are biologically wired to want to be part of a group/have interaction with other humans, peer pressure is sometimes a way to fill the void of being a part of a group. When someone gives into the pressure of their friends, they feel like they belong more and are interacting positively with others.

Alcohol needs to be used responsibly; otherwise it can cause many hazardous problems in a person's life. Alcohol is very dangerous for many organs in the human body, especially the brain. When alcohol is used irresponsibly it can cause memory loss, motor skills loss, or even death in some instances. There have been many studies done over the years to show that binge drinking is a cause of that. Studies have also been done to show that peer pressure is a very large

cause of binge drinking, especially in young adults in teens. Binge drinking can lead to many delinquent acts like violence, homicide, and even suicide.

Violence

Violence is a serious problem in society today; it is incorporated into so many part of each person's life. Violence has been shown in many studies to be caused by several different factors. There have been studies shown over time that there is a specific part of the brain that causes violence among animals, and most recently the study has been shown to prove the same results with humans. Another factor that influences violence in a person's life is their family structure and where they grew up. Where a person grows up and what their family is like in the home is extremely important when looking at violence. Lastly, peer influence has a lot of power over someone and could very easily sway him or her to be more violent.

Violence is caused by many different factors such as; neighborhood/peer influence, childhood upbringing, and cognitive functions in the brain. Regions that are in the brain that have been shown to cause people to act out and enable violence are located in the hypothalamus region. The hypothalamus portion of the brain is responsible for a variety of things, these include: feeding, metabolism, body temperature, thirst, fatigue, and most importantly in this subject—aggression (Gaidos, 2015). In this same article by Gaidos, it is discussed that the same neurons that are released during aggressive encounters are also released during mating (study done with animals) (2015).

Violence can occur in many places in a person's life. It can occur in the home, at a friend's house, school, or a person can see violence going on throughout their neighborhood. When most people think about the younger generation seeing violence around them, they think that it is only children living in impoverished neighborhoods. However, this is not the case;

national studies that have been done show that up to 60% of all US youths report exposure to some form of violence, either directly or indirectly, in a given year (Zimmerman & Posick, 2016). Many things in a person's life influence exposure to different violence and different situations that involve violence. Exposure to violence is a significant factor that leads to children growing up and continuing the violence through their own lives. When a child grows up in a home that is not stable, he or she is more likely to be exposed to violence. Non-intact family structures, low socioeconomic status, residential instability, conflict, and low emotional or social support are all contributing factors to this (Zimmerman & Posick, 2016) (Anderson, 1999). When a family displays aggressive behaviors, such as parents being aggressive towards one another, this can show an adolescent that this kind of behavior is acceptable. All of this leads to a chain of non-stop aggressive behavior towards others since the child has learned it in his or her own home.

Peer influence is a big factor when contributing to any delinquent act that a person commits. Peer influence can have a negative effect on people, or they can also influence their other peers to be positive as well (Avcı, 2013). When a person experiences their peers committing delinquent acts, such as violence, the person is likely to follow in their footsteps to also committing acts like violence. Since peer influence has such a big influence on people—it is common for peer influence to be a factor that contributes to alcohol related violence. If a person is out at night with their friends drinking and they go home with them and witness domestic abuse, they are more likely to think that it is acceptable to do this as well.

Alcohol consumption leads to violence

Alcohol and violence can be extremely dangerous to the human population, but they can be even more dangerous when the two are mixed together. When a person is under the influence

of alcohol, I believe that it is more likely that violence will occur. Alcohol is the cause of many types of violence—suicide, homicide, assault, and domestic abuse. With the factors that were discussed in the violence section and the use or abuse of alcohol, people are very likely to act hostile or aggressive towards others. There have been many studies that have shown how alcohol leads to this type of crime and violence, and it varies geographically which shows that it is a problem all over the world and not just in the United States. Both of these things together cause a major health problem among the human race.

Suicide rates coincide with alcohol use and binge-drinking. In a study, it was shown that the per capita consumption of alcohol was associated with the suicide rates and this study has been done at an individual and societal level (Lester, 1993). It was proven that suicide rates were higher in places that do not have strict alcohol limitations. When looking at homicide rates in the United States, studies show that they are higher in places that are more alcohol oriented (NORSTRÖM, 2011). This study also mentions that people are more likely to act in a hostile and irrational way when they have been drinking (binge-drinking). People are more likely to engage in a delinquent act like causing a homicide when they are under the influence of alcohol and are not thinking clearly. The study that tested these two theories on alcohol and homicide/suicide were proved by dividing the US into three separate regions: Wet states, Moderate states, and Dry states. This study proved there is a strong relationship between the “wet” region and homicide and suicide rates (NORSTRÖM, 2011) (Lester, 1993).

There have also been many studies that have looked at the relationship between alcohol consumption and assault rates. Assaults that are alcohol related are more likely to happen in areas where there are outlets of alcohol near; these types of places include places like bars, restaurants that serve alcohol, or any other type of place that may serve alcohol. It is especially

common for events like this to happen in urban areas where there are more people and more places to consume alcohol. However, this does not mean alcohol related assaults do not happen in rural and suburban areas. In the study done by Pridemore and Grubestic (2011), in Cincinnati, Ohio it shows a clear relationship between assaults happening in the urban city and how they happened near outlets of alcohol where people were presumed to be heavily or moderately drinking alcohol. When people are drinking alcohol, just like with homicide/suicide rates, they are more likely to engage in aggressive behaviors, not only with themselves but with others as well.

Alcohol causes many people to commit delinquent and harmful acts to themselves and others; it can also cause people to be violent towards a spouse or significant other in domestic violence. Many general studies have been done on alcohol use and levels of violence, but very few discuss alcohol use and domestic violence specifically. Since domestic violence is still aggressive behavior it can be assumed that with the use of alcohol people will still act aggressively and violently towards their spouse; especially if they have had different earlier experiences to make them more violent towards others. There is a positive correlation between alcohol use and domestic violence, especially on a weekend (Roman & Reid 2012). Since a lot of people tend to go out and have drinks on the weekends instead of weekdays, this is why there is a stronger relationship for domestic violence, but it still happens at all times of the week and all times of the day.

There are many factors that cause a human to be violent towards himself or herself or another person, which were discussed previously. Alcohol is another issue that can factor into this to cause someone to be violent. The violence can be in many different types of crime:

domestic violence, assault, homicide, and suicide. Many studies show that alcohol contributes to violence and committing delinquent acts.

Alcohol consumption and violence related to social bonding theory

Social bonding theory is an important theory to look at regarding alcohol use leading to violence in the population. I could not locate any academic journals that proved this, however the one I was able to locate shows the correlation between violence and social bonding theory (Karriker-Jaffe, 2011). This study showed that when male adolescents had more conventional beliefs, levels of violence was increased. This theory contains four different explanations for this; attachment to relationships or cultural standards, commitment to another group or activity that is a social norm, involvement in activities, and belief that all of these things are important (Biancur, 2014). The part of the theory that I want to look further into though is involvement in activities.

When looking at social bonding theory, we examine the social problems that exist in our world and why they are happening. This is extremely relevant when looking at alcohol use and how it leads to higher levels of violence—which is why there should be more studies that are done on this. Hirshi's theory of social bonding is so closely related to the General theory of crime; the only difference between the two is that social bond theory is at a more individual level and looks at the different types of things people must be interested in and how this reduces crime. The involvement aspect of social bond theory states that a person chooses to get involved in positive and rewarding activities, or they can choose to be involved in negative and deviant activities. The people who are drinking high levels of alcohol and are engaging in violent behaviors are the people who chose to involve themselves in the deviant behaviors. These people who engage in these types of behaviors need to find a positive activity to involve

themselves in so that they do not have time (or as much time) to engage in deviant behaviors like alcohol use and violence.

Social bond theory is an important element to look at when looking at how alcohol use leads to higher levels of violence in a society. People that are engaged in positive activities and are functioning members of society do not have time to engage in such behaviors such as assault and other crime related violence. The people that struggle with this are people who did not learn right from wrong at a young age and chose to participate in deviant acts because they do not see how negative and criminal it is. I believe that researchers, sociologists, psychologists, etc. need to look more into how social bond theory has a strong relationship with these two activities.

Conclusion

Alcohol and violence together are very dangerous to the human body and to society. Alcohol can lead to health hazards and cause damage to the brain and other vital organs, which was proven in this study. Violence is learned in many different ways, but it is extremely dangerous to the human body--externally and internally. Peer pressure affects both of these variables greatly. As examined in this study, social bonding theory by Hirschi explains how alcohol and violence both lead to delinquency with his explanation of involvement.

Methods

Sample

The present study was done using the Kentucky Youth Survey; which is an ongoing data collection project that focuses on students that are in grades 6 through 12 throughout the state of Kentucky. The survey was designed to question these students about smoking, drinking, drug use, and other delinquent behaviors. It also examines things such as families, attitudes they have toward school, involvement in school victimization and violence, peer behaviors, and religious

attitudes (Wilcox & Clayton, 2001). The current data examined is from the Spring of 1996. The sample of 6th through 12th graders was a sample of 13,349 students from across 22 schools in the Kentucky region. The surveys were administered by teachers and were given during one class period during the day and collected anonymously. There was parental consent as well and Institutional Review Board approval before the surveys were given out (Wilcox & Clayton 2001).

Measurement of Variables

Alcohol

In order to measure alcohol use, which is my independent variable, only one item was used based on the Kentucky Youth Survey. The questions included in measuring alcohol consumption included: “best describes how much alcohol drink at one time?” The category of answers for these questions included 1=none to 5=very large amount. The mean for the responses to this one alcohol question were less than half (Table 1).

Violence

In order to measure violence levels, which is my dependent variable, an 8-item scale was constructed based on the Kentucky Youth Survey. The questions included in measuring violence levels were: “ever shoved or tripped anyone,” “ever sat on someone or pinned someone down,” “ever hit, punched, or slapped someone with your hand or fist,” “ever hit someone with an object you were holding,” “ever pulled, twisted, squeezed, or pinched part of other’s body,” “ever laid trap for someone so he/she would get hurt,” “ever been in a fist fight,” and “ever used a weapon during a fight.” The responses for these questions were 0=no and 1=yes. The average of the violence index questions was close to 50% (Table 1).

Control Variables

There were three control variables that were used in this survey as well. These variables included race, age, and sex. The answers for these included writing in their own age as a number, race was 1=white 0=non-white, and sex was 1=male and 0=female. The statistics for the control variables are outlined in Table 1.

Results

Table 2 shows a bivariate correlation matrix of all study variables, including control variables. The hypothesis that higher alcohol use leads to violence was proved to be correct at the bivariate level (Table 2). All variables proved to be significant at the bivariate level of measurement. Table 3 shows a regression model for the variables used in the study. At the multivariate level (Table 3), the hypothesis is also proved to be true. The data showed that as the level of drinking increases, a person's level of violence also increases by .754 units. This measurement is shown to be significant at .000 level of significance.

Conclusion

Hirshi's Bonding Theory relates to the topic of alcohol and levels of violence--especially when viewing the involvement portion of the theory. When a person chooses not to involve themselves in activities, they will likely get into delinquent behavior (which includes alcohol use and violence). The hypothesis used for this particular study was higher levels of alcohol use leads to more violent behaviors. The hypothesis shown in this study was to prove that higher levels of alcohol use leads to more violent behaviors, and the hypothesis was proven to be

correct. The hypothesis was proven to be correct at both the bivariate and multivariate level of testing.

Like many studies, there are many strengths and weaknesses to this one as well. Strengths of this paper include the many articles and journal publications that were available for the literature review section of the study. Another strength of the paper was that the data was all correct and there were no mistakes because it was already available for use. However, along with the secondary data that was used made the study more limited since I was not able to collect my own data for more of a variety of respondents in the survey. Another limitation or weakness of this study was that the questions were that the age range of respondents were all under 21 (the legal drinking age), which could have affected the results of the respondents. They could have not answered truthfully since they are legally not supposed to use alcohol.

There are a few suggestions that could be made to this study for further research. One of the suggestions that I think would be beneficial to this study is that a wider age range of respondents are chosen that are above age 21. Another suggestion that could be made for this study would be to get more recent data and compare it to see how it has changed over the years, and to compare with the older age group.

Works Cited

- Anderson, E. (1999). Code of the Street: Decency, Violence, and the Moral Life of the Inner City. In E. Anderson, *Code of the Street: Decency, Violence, and the Moral Life of the Inner City* (pp. 1-100). New York , New York: WW Norton & Co.
- Avci, R. &. (2013). The Relationships among Interparental Conflict, Peer, Media Effects and the Violence Behaviour of Adolescents: The Mediator Role of Attitudes towards Violence. *Educational Sciences: Theory And Practice* , 13 (4), 2005-2015.
- Biancur, C. L. (2014, September 15). *The Social Bond: Academic Fulfillment throughout Adolescence*. Retrieved April 10, 2016, from mckendree.edu:
<https://www.mckendree.edu/academics/scholars/issue13/biancur.htm>
- Cychosz, C. (1996). Alcohol and Interpersonal Violence: Implications for Education. *Journal of Health Education* , 27 (2), 73-77.
- Gaidos, S. (2015). Aggression avenue: tracing how the brain is wired for violence. *Science News* , 6 (18).
- Gregory M. Zimmerman & Chad Posick, P. (2016). Risk Factors for and Behavioral Consequences of Direct Versus Indirect Exposure to Violence. *American Journal of Public Health* , 106 (1), 178-188.
- Hingson RW, E. E. (2009). Age of drinking onset and injuries, motor vehicle crashes, and physical fights after drinking and when not drinking. . *Alcohol Clin Exp Res* , 33, 783–790.

- Karriker-Jaffe, K. J. (2011). Examining How Neighborhood Disadvantage Influences Trajectories of Adolescent Violence: A Look at Social Bonding and Psychological Distress. *Journal of School Health* , 81 (12), 764-773.
- Lester, D. (1993). Restricting the availability of alcohol and rates of personal violence (suicide and homicide). *Drug and Alcohol Dependence* , 31, 215-217.
- Li, Q. W. (2010). Cohabitation, gender, and alcohol consumption in 19 countries: a multilevel analysis. *Substance Use & Misuse* , 45 (14), 2481-2502.
- National Council of Alcohol and Drug Dependence. (2015, June 27). *NCADD*. Retrieved February 18, 2016, from NCADD: <https://ncadd.org/about-addiction/alcohol-drugs-and-crime>
- NORSTRÖM, T. (2011). Alcohol and homicide in the United States: is the link dependent on wetness? *Drug and Alcohol Review* , 30 (5), 458-465.
- Pridemore, T. H. (2011). Alcohol outlets and clusters of violence. *International Journal of Health Geographics* , 10 (1), 30-41.
- Reid, C. R. (2012). Assessing the Relationship Between Alcohol Outlets and Domestic Violence: Routine Activities and Neighborhood Environment. *Violence and Victims* , 27 (5), 1-19.
- Reid, R. &. (2012). Assessing the Relationship Between Alcohol Outlets and Domestic Violence: Routine Activities and the Neighborhood Environment. *Violence and Victims* , 27 (5), 811-828.
- Thayanukulvat, C. &. (2015). Binge drinking and cognitive impairment in young people. *British Journal of Nursing* , 24 (7), 401-407.

Varela, A. &. (2010). Peer Influence: Use of Alcohol, Tobacco, and Prescription Medications. .
ournal Of American College Health , 59 (8), 751-756.

Zheng, H. K. (2015, January 10). cute Effects of Alcohol on the Human Brain: A Resting-State
fMRI Study. *Biomed Research International* , 1-10.

Table 1. Descriptive Statistics for Study Variables

Variable	Metric	Descriptive Statistics		
		Mean	S.D.	Range
Best describes how you drink alcohol at one time	(1=none.....,5=very large amount)	1.9979	1.2491	1-5
Violence Index	(0=not violent....., 8=very violent)	3.7740	2.4903	0-8
Sex	(0=female, 1=male)	.5090	.500	0-1
Race	(0=white, 1=nonwhite)	.8539	.3533	0-1
Age	(number of years)	14.069	1.9966	10-20

n = 1374

Table 2. Bivariate Correlation

	1	2	3	4	5
1. Violence Index					
2. Best Describes how you drink alcohol	.348*				
3. Sex	.254*	.083*			
4. Age	.056	.412*	.009		
5. Race	.059	.044	-.023	.412	.043

p<.05 *

Table 3. Regression

Independent Variables	Violence Index	
	Coeff.	S.E.
Alcohol	.754*	.053
Age	-.138*	.032
Race	-.981*	.170
Sex	1.213*	.119

*p<.05