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Effectiveness of Responsible Beverage Service Policies in Reducing Drunk-Driving in Maryland

RHODA MAKINDE
Walden University

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Walden University

College of Health Sciences and Public Policy

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Rhoda Makinde

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Dr. Clarence Schumaker, Committee Member, Public Health Faculty
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Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
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Abstract

Effectiveness of Responsible Beverage Service Policies in Reducing Drunk-Driving in Maryland

by

Rhoda Makinde

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

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May 15th, 2022

Abstract

In the State of Maryland and across the United States, driving under the influence (DUI) has led to a massive loss of lives and disability cases. Hence, responsible beverage service (RBS) policies and programs have been developed to prevent and control DUI incidence. This study sought to identify the effectiveness of these policies in addressing the DUI-related fatalities and injuries among young adults (18–30 years old) in the State of Maryland. Using program theory to evaluate the effectiveness of RBS policies and programs in reducing DUI, this qualitative research sampled bar patrons, club patrons, and alcohol servers/service staff in Baltimore. Ten participants were interviewed, and interview data were transcribed verbatim then coded for themes related to DUI and punishments. For inclusion, the study focused on servers and bar managers aged between 18 and 35 years old. Results indicated that RBS policies were effective and may reduce DUI among young adults in Maryland if properly implemented. Participants reported avoiding serving intoxicated patrons to avoid punishment, and servers and patrons considered several factors before serving a customer, including a customer's age, current consumption levels, medical status, and attitude. The results on the effectiveness of RBS policies showed that server training programs provided trainees with significant knowledge and skills necessary for their jobs. Thus, it has a significant promise in preventing DUI offenses. Effective implementation of this study's recommendations may lead to significant social change, including reductions in alcohol sales to underage buyers and in the number of cases in which drunk consumers are allowed to buy more alcohol. The social implications include the identification of interventions among young adults (18–30 years) to decrease DUI-related offenses.

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Table of Contents

List of Figures.....	iv
Chapter 1: Introduction to the Study.....	1
Background.....	1
Problem Statement.....	2
Purpose of the Study.....	3
Research Questions.....	4
Nature of the Study.....	5
Definitions.....	6
Assumptions.....	7
Scope and Delimitations.....	7
Limitations.....	8
Significance.....	8
Summary.....	9
Chapter 2: Literature Review.....	10
Literature Search Strategy.....	10
Theoretical Foundation.....	10
Conceptual Framework.....	11
Literature Review Related to Key Concepts.....	12
Research Design and Rationale.....	20
Role of the Researcher.....	22
Methodology.....	24

Rationale for Participant Selection	25
Instrumentation	26
Recruitment Procedures, Participation, and Data Collection.....	26
Data Analysis Plan.....	28
Issues of Trustworthiness.....	28
Summary	29
Chapter 4: Results.....	30
Pilot Study.....	30
Setting.....	31
Demographic.....	31
Data Collection	31
Data Analysis	32
Evidence of Trustworthiness.....	32
Results of Server Training in Maryland.....	33
Thematic Analysis	37
Chapter 5: Discussion, Recommendations, and Conclusions.....	41
Discussion of Findings.....	41
Research Objective 1	41
Research Objective 2	48
Research Objective 3	52
Enforcement of State Alcohol Service Laws	56
Hindrances to Effective Server Training	58

Limitations of the Study.....	59
Social Implications.....	60
Conclusion	61
For Researchers.....	61
For Servers	62
For Adult Educators.....	63
For Governmental Agencies	64
Recommendations.....	64
For Researchers.....	64
For Servers	65
For Adult Educators.....	65
Government Agencies.....	66
References.....	68

List of Figures

Figure 1	<i>Interventions to Minimize Alcohol-Related Harm by Licensed Establishments</i>	12
Figure 2	<i>Server Training Versus Policy Support</i>	35
Figure 3	<i>Employer Policy on Checking of Underage Identification and Over Serving</i> .	37
Figure 4	<i>Word Frequency Query for Major Themes</i>	38

Chapter 1: Introduction to the Study

Every day, Americans use motor vehicles to move from one place to another to fulfill their personal and collective goals. However, the increase in alcohol-impaired automobile fatalities, injuries, and crashes in the last decade is a reminder of how the issue of drunken driving threatens modern society (Hogan, 2015). The National Academies of Sciences, Engineering and Medicine (NASEM, 2018) indicated that court-ordered treatment programs, intensified law enforcement, and mass media and school-based education programs have helped alter the normative perspective relating to drinking and driving. However, NASEM noted that the effectiveness of the aforementioned programs has been limited by the attempt to change the behavior and attitudes of individuals.

Background

The ability of people to change their behaviors and habits is largely dependent upon situational influences. Therefore, prevention specialists have suggested focusing on reducing the risk of driving under the influence (DUI) through modifying the drinking environment itself (Hogan, 2015). Using appropriate alterations to the environmental contexts with necessary educational approaches may lower the risk of drunk driving relative to the use of an intervention or prevention strategy alone (Centers for Disease Control and Prevention [CDC], 2018). Therefore, it is increasingly important to adopt various strategies that encourage the creation of safer drinking environments, thus reducing the risk of intoxication among drivers. These strategies may include increased responsible beverage service (RBS) training, altering decor as a way of encouraging safer drinking, promoting food consumption, and increasing the price of alcoholic beverages (Hogan, 2015).

Traffic accidents take a toll on life and property that is only comparable to casualties in warfare. This problem is worsened by drunk driving. In light of this problem, I explored the efficacy of RBS

policies in reducing alcohol-impaired driving in Maryland. This study will promote safe driving behavior among young Americans by proposing effective measures to enhance the effectiveness of RBS policies.

Problem Statement

Binge drinking causes nearly 40,000 deaths in the United States per annum, with at least 28 people dying every day due to alcohol-related crashes (National Highway Traffic Safety Administration [NHTSA], 2015). In 2015, 10,265 people died in alcohol-impaired driving crashes, accounting for nearly one third (29%) of all traffic-related deaths in the United States (NHTSA, 2015). Although numerous control policies have been put in place to reduce excessive alcohol consumption, alcohol-related road fatalities persist in all parts of the country, including Maryland. Alcohol-impaired driving is also one of the most commonly committed crimes in the United States (NHTSA, 2015). According to the National Center for Statistics and Analysis (NCSA), 10 deaths per 100,000 people were associated with drinking and driving in 2014 (Alonso et al., 2015). Alcohol-related crashes claimed an average of one life every 53 minutes in 2014 and 2015, according to a survey conducted by the NCSA (Hess et al., 2014). According to the NHTSA (2015), over 31% of motor vehicle deaths in the country are related to drinking and driving.

Although this problem affects adolescents and adults, young adults are the most affected by drunk driving (Hess et al., 2014). In particular, most people who die of alcohol-related crashes are young adults aged between 21 and 24 years (Hess et al., 2014). Despite numerous policies and strategies developed to curb alcohol-impaired driving in Maryland and other parts of the country, injuries and deaths related to alcohol-impaired driving still persist (Sanem et al., 2015). One of these policies in

Maryland includes RBS (Scherer et al., 2015). In light of these concerns, there is need to evaluate the effectiveness of RBS policies in reducing drinking and driving in Maryland.

Purpose of the Study

The primary objective of this study is to determine the effectiveness of RBS policies as reported by study participants in the prevention of drunk driving related injuries and deaths in Maryland.

Maryland is among the best states for entertainment due to its beautiful scenery and recreational facilities that overlook the Atlantic Ocean (MacKay, 2018). Nevertheless, alcohol consumption is a major problem for visitors and residents of the state due to poor observance of RBS rules and legislative regulations regarding the level of alcohol consumption. Miller et al. (2015) indicated that there is a gap in knowledge about alcohol consumption and regulations of the level of intoxication allowed for a driver. The harms of irresponsible drinking have also been highlighted by Scherer et al. (2015), who found that about a third of all alcohol-related accidents result from careless driving by individuals who have just left a bar without being informed of the dangers of drunk driving.

The aforementioned studies have emphasized and examined the negative effects of DUI and the weaknesses in legislation that regulate alcohol consumption. However, there is no research that comprehensively evaluates the effectiveness of RBS policies in Maryland or how the policies can be improved to reduce the incidence of DUI. There is also inadequate information on how patrons can be comprehensively advised on the precautions to take when impaired to the extent that they can cause accidents if they drive.

Stoil and Hill (1996) discussed how to establish responsible alcoholic RBS policies for all retail outlets and wholesale establishments. However, there is still a gap in the literature concerning training servers and other bar employees on how to adequately concentrate on the RBS requirements rather than

on the establishment's profit-making agenda. In this study, I thus sought to bridge the gap that exists in the efficacy of RBS policies through qualitative research methods. This study provides information on the extent to which RBS policies have reduced drunk driving in Maryland, the outcomes of the implementation of RBS policies, and how RBS policies can be improved or modified to prevent drunk-driving-related injuries and deaths.

In this study, I also explored young adults' opinions about these policies. RBS can be described as codification of policies in which beverage servers are held legally liable for harms that are inflicted by their drunken patrons, commonly referred to as *dram shop liability* policies (Scherer et al., 2015). RBS initiatives often represent a response to the challenges of dram shop liability litigations against bar investors and to the discovery that drivers who leave bars and restaurants cause almost a third of alcohol-associated accidents (Scherer et al., 2015).

RBS programs are often comprised of several elements and phases. The first step requires the establishment of a clearly stated RBS policy for retail outlets (Stoil & Hill, 1996). Secondly, servers need to be trained in order to meet the requirements of the policy. This includes checking identification in order to deter underage drinking, providing food and nonalcoholic beverages, and stopping service whenever necessary (Stoil & Hill, 1996).

Research Questions

Three research questions were used to help address the research problem. The three questions are intended for bar owners, and those working in establishments that serve alcohol.

R1. How do bar owners, managers, and servers perceive the effectiveness of RBS in reducing drunk driving among young adults in Maryland?

R2. How do bar owners, management, and servers describe the impact of RBS policies in reducing drunk driving among young adults Maryland?

R3. How can RBS policies be improved to generate positive outcomes in reducing drunk driving in Maryland?

Nature of the Study

This study employed a qualitative design. The qualitative approach is appropriate for gathering sufficient information to explore the effectiveness of policies on drunk driving in Maryland as perceived by study participants. Qualitative research is used to holistically understand people's experiences in various settings. Chalhoub-Deville and Deville (2008) described the qualitative approach as interdisciplinary, encompassing numerous epistemological viewpoints, interpretive techniques, and research methods for understanding people's experiences. Qualitative data collection methods, such as unstructured interviews and observations, are helpful in creating a better researcher-participant rapport (Cohen et al., 2011). Qualitative design helped me realize the main objective of this dissertation, which was not only to explore the impact of RBS policies on DUI, but also to provide workable solutions aimed at improving the effectiveness of RBS policies on drunk driving in Maryland. According to Tewksbury (2009), the qualitative approach provides researchers with holistic information that takes into considerations other factors like environmental forces. Rubin and Babbie (2012) asserted that the qualitative approach encourages flexibility, as there is enough room to modify the research design. It is also easier to prepare for qualitative research whenever an occasion arises (Creswell, 2007).

I had no relationship or prior knowledge of the participants in any of my selected sites, such as bars and restaurants and the Mothers Against Drunk Driving office in Baltimore, for recruitment of participants. Gaining access to the participants involved obtaining permission at different levels, such as

the Walden University Institutional Review Board (IRB). I sought permission from Walden University before accessing research participants. A compensation of a \$10 gift card was given to the participants for their effort and time participating, which took approximately 60 minutes per participant.

I also provided flyers to research participants and their organizations detailing the nature of the study and qualification for participation. These flyers were shared during one of my site visits and distributed to prospective participants and their organizations with my contact numbers, instructing interested participants to contact me. During my subsequent visits, interested participants were identified and interviewed using an open-ended questionnaire.

Definitions

Responsible beverage service (RBS) is a program aimed at encouraging a responsible and caring approach to serving alcohol in order to decrease alcohol service-related issues. RBS policy is a strategy that has been utilized by many governments to prevent the hazardous use of alcohol by individuals in restaurants and bars (MacKay, 2018). Many researchers have found RBS policies to be effective in addressing the increasing issue of road fatalities that are associated with drunk driving (Rauch et al., 2010). RBS policies utilize numerous intervention measures that are outlined in the literature review section of this study.

Recidivism is the habitual addiction to crime; it is a tendency to lapse into past patterns of behavior, particularly a pattern of criminal behavior. There are some people who embrace criminality as their mode of life and engage in criminal activities with boldness and courage. Many jurisdictions are using drug and alcohol treatment programs to manage recidivism of alcohol- and drug-related offenders. The term is usually used to determine the success of institutional programs (Zara & Farrington, 2015).

Driving under the influence or *drunk driving* is a crime of driving or operating a vehicle while impaired by alcohol and/or other drugs including recreational drugs and medicinal drugs, to a point that renders a driver incapable of driving a vehicle safely (Walsh et al., 2010).

Intoxication is a condition associated with the administration of a psychoactive substance that leads to disturbances in levels of cognition, judgment behavior, consciousness, or other psychophysiological responses. A person reaches a point of intoxication when alcohol produces physical and/or mental impairment such as disorientation, slurred speech and/or difficulty walking. Level of intoxication is distinguishable through blood tests and breathalyzers (World Health Organization, 2019).

Assumptions

One of the major challenge in this study related to standardization of intoxicated behavior. For this study, it was assumed that an intoxicated person is unconscious and has mental confusion. I assumed that the research participants would provide honest responses to the interview questions. Moreover, I assumed that states with low DUI cases have strong RBS regulations that those with weak RBS laws. Most importantly, I also assumed that the respondents had undergone RBS training. In essence, it was important to have known the RBS training status of individual servers.

Scope and Delimitations

In this research, I aimed to identify the effectiveness of RBS in reducing DUI in Maryland. To explore the effectiveness of RBS policies in reducing impaired driving among young persons in Maryland, this study explored RBS training services provided by local agencies and well-established vendors providing such services. The study also focused on major factors affecting implementation of RBS policies and examined the effectiveness of enhanced enforcement measures aimed at ensuring the efficacy of RBS programs.

Today, various legislation encourages consumers to drink more alcohol than what vendors educate them on the limits of alcohol consumption. Wholesale or retail alcohol vendors are required to have sufficient knowledge of the quantity of alcohol that consumers should consume and their condition before selling them alcohol. Employees ought to inform consumers whenever they are drunk so that the management can suggest alternative source of refreshment for these consumers (Miller, 2017). Although these requirements are comprehensively highlighted in RBS policies, they are often not followed by alcohol vendors (Van Dyke & Fillmore, 2014).

Limitations

This study only provided information on the extent to which RBS policies have reduced drunk driving in Maryland, the outcomes of the implementation of RBS policies, and how RBS policies could be improved or modified to prevent drunk-driving-related injuries and deaths. It did not explore the effectiveness of other measures such as ignition interlocks laws, sobriety checkpoint policies, mass media campaigns, alcohol screening interventions, and suspension laws in reducing DUIs.

According to the CDC (2019) ignition interlocks have proven effective at preventing repeat offenses by interlocking cars if a driver has attained a BAC level of more than 0.02%. Sobriety checkpoints allow law enforcement officers to briefly stop drivers at a specific point to see if they are impaired. Mass media campaigns persuade people to stop drink driving and are most effective when used to support other DUI prevention strategies. Suspension laws allow law enforcement officers to take away licenses of drivers who test at above the legal BAC limit.

Significance

This study can prove effective in understanding the effect of RBS policies on DUI offenders' future behavior. These policies usually provide various stakeholders with appropriate guidance for how

they can effectively implement service practices and policies. There is a need to collect more information from individuals who help fight DUI in order to understand the impact of RBS policies on people. There are numerous studies showing that DUI arrest cases have increased in the past decade (Gjerde et al., 2013). Although lawmakers have passed many laws regulating alcohol consumption and driving, people still commit DUI offenses repeatedly. Bar owners and workers will make the best policy implementers with regards to reducing DUI crimes because they can effectively discuss the impact of RBS policies DUI.

To understand the role that RBS policies play in reducing DUI offenses, it is also important to understand the motivation that causes offenders to commit these crimes repeatedly. The policies that are currently employed are ineffective as evidenced by the 10,265 DUI deaths in the United States in 2015 (NHTSA, 2015). Hence, there is a need to implement effective measures and initiatives to reduce DUI-related deaths in the country. This study suggests measures to policymakers for effectively preventing DUI crimes.

Summary

The primary objective of this study was to determine the effectiveness of RBS policies as reported by study participants in the prevention of drunk driving related injuries and deaths. Bar owners and workers can help reduce DUI-related injuries and deaths by adhering with provisions of RBS policies. In this study, I attempted to explore the efficacy of RBS policies in reducing alcohol-impaired driving in Maryland. By shedding light on these policies, this study promotes safe driving behavior among young Americans by proposing effective measures to enhance the effectiveness of RBS policies.

Chapter 2: Literature Review

In this chapter, the literature is reviewed thematically, and I focus on the attributes of the study objectives. In particular, I focus on the premise that alcohol-impaired driving is one of the leading causes of road fatalities in Maryland. Hence, many jurisdictions, including Maryland, have enacted RBS to reduce drunk driving. This chapter was divided into different subsections including literature research strategy, theoretical foundation, literature related to key concepts, and summary and conclusion.

Literature Search Strategy

There is a wide body of knowledge regarding the effectiveness of RBS policies in reducing drunk driving. For this reason, I conducted preliminary research to assess the extent to which the existing body of knowledge addressed the proponents of the subject matter. The literature research strategy is a comprehensive analysis of the various articles and studies related to the effectiveness of RBS policies and how they influence drinking and driving behavior. In particular, the paper utilized a systematic review of databases such as Transportation Research Information Services, National Technical Information Services, Social SciSearch, and PsychINFO. This strategy helped in identifying relevant materials that outline the various intervention programs that have been utilized in different countries to reduce the rates of drunk driving. The process of reporting participants' positions must be free of bias (Schell et al., 2006). Participants must feel free to share their perspectives about the effectiveness of RBS policies.

Theoretical Foundation

Program theory is used to evaluate the effectiveness of RBS policies in reducing drinking and driving in Maryland (Funnell & Rogers, 2011). This theory provides a systemic mechanism to gather, analyze, and utilize information to answer questions about policies and programs with respect to their

effectiveness and efficiencies (Funnell & Rogers, 2011). The program theory model utilizes three major elements to describe the program: program activities or inputs, the intended outcomes, and the methods through which the intended outcomes are attained. These evaluation criteria fall under formative evaluation, summative evaluation, and outcome evaluation (Funnell & Rogers, 2011). The purpose of program theory is to ascertain the effectiveness of RBS policies. Program theory comprises a collection of statements that are important in projecting the outcomes or effectiveness of a given policy (Funnell & Rogers, 2011). This theory provides logical approaches that can be used to assess the efficacy of RBS policies. Program theory is important in identifying the way that researchers can understand how a particular policy works and what intermediate outcomes need to be attained for the policy to be successful (Funnell & Rogers, 2011). This allows researchers to draw a sharp distinction between implementation failure and theory failure.

Program theory makes it easier to test whether the right aspects of the RBS policy implementation have been measured (Funnell & Rogers, 2011). In case the outcomes indicate that the policy is successful, as the treatment group had significantly expressed better outcomes than the no-treatment group, it may be difficult to use these outcomes in a broader manner. That is especially true if the elements of the policy are important, and there is need to copy it exactly for fear of missing an essential component (Funnell & Rogers, 2011). However, program theory does not offer any guideline on how to adapt or embrace the policy in other settings.

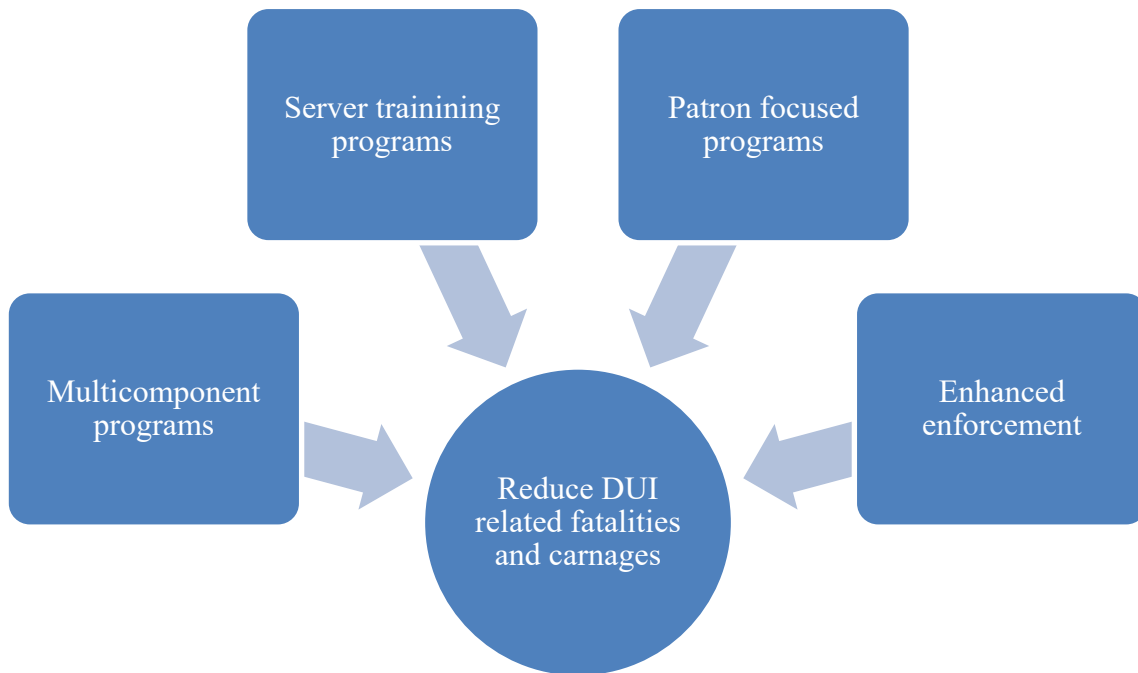
Conceptual Framework

The common RBS interventions among licensed bars and restaurants were expressed in a conceptual framework that included four different types of interventions from literature review (see Figure 1). They included patron-focused programs, server training programs, multicomponent programs,

and enhanced enforcement. The aim of each program was to minimize alcohol related harm in communities.

Figure 1

Interventions to Minimize Alcohol-Related Harm by Licensed Establishments



Literature Review Related to Key Concepts

Research has indicated that drunk driving poses a serious threat to both public safety and health (Grube & Nygaard, 2005). In this regard, DUI not only present an individual risk to drunk drivers, but also expose other people to danger. At least 242,900 people lost their lives in 2002 across the globe due to traffic accidents related to the influence of alcohol (Grube & Nygaard, 2005). In addition, Grube and Nygaard (2005) indicated that alcohol-related traffic accidents accounted for about 7.5 million disability-adjusted life years. The significantly high level of deaths and disabilities caused by traffic accidents indicates a need for appropriate interventions that can reduce DUI-associated traffic fatalities.

Research has suggested that one of the most effective ways of lowering alcohol-related traffic accidents is to target offenders who are well known to the public. Recidivist DUI offenders are responsible for a significant portion of offenses, with numerous studies indicating that about only one third of known offenders end up being arrested (Voas & Fell, 2010). In addition, Grube and Nygaard (2005) established that recidivist offenders who drive under the influence of alcohol are highly likely to persist in their DUI behavior relative to their first-time offender counterparts. The researchers define a recidivist as a person who is habitually addicted to crime. Thus, second time offenders are more likely to reoffend than first timers. Existing literature has also revealed that repeat offenders portray more defiant behaviors and the level at which they abuse drugs is high. They also have higher levels of unemployment and psychiatric distress compared to first-time offenders (O'Day et al., 2017). These facts suggest numerous factors that need to be addressed as a part of prevention programs for DUI.

Through use of various interventions to prevent DUI offenses, research has shown that alcohol-related crashes and DUI recidivism may be reduced to 7%–9% upon implementation of DUI prevention programs (World Health Organization, 2008). Further, a combination of interventions, such as psychotherapy/counseling and education, may have a larger effect size than interventions that include a single intervention component. A study conducted by NHTSA indicated that RBS training combined with proper enforcement reduces bar patron intoxication from overserving and subsequent impaired-driving incidents, particularly when service staff members are properly aware of and trained in RBS. A research review conducted in 2001 indicated that there was a strong support towards implementation of the 0.08% BAC laws, sobriety checkpoints, and laws on a minimum legal drinking age (Carpenter, 2007).

Although Scherer et al. (2015) reported that RBS has a major impact of on alcohol-impaired driving, Linde et al. (2016) stated that there was no evidence of major association between RBS law strength and self-reported binge drinking or alcohol-impaired driving. In an attempt to determine the potential relationships between the strength of state RBS laws and self-reported binge drinking and alcohol-impaired drinking in the United States, Linde et al. undertook a multilevel logistic mixed effects model, adjusting for potential cofounders. Evaluations were undertaken on the whole Behavioral Risk Factor Surveillance System (BRFSS) sample and on drinkers only. The BRFSS is the country's approach of health-related telephone survey used to collect data about the United States residents concerning their health-related risk behaviors and use of preventive services. Linde et al. found that 7% of BRFSS respondents lived in states that had the highest RBS laws, whereas 15% recorded binge drinking. Further, the study showed that 2% engaged in drinking after having too much to drink at least once in 30 days.

Rossow and Baklien (2010) observed that the efficacy of RBS policies can only be realized if they are implemented correctly. In their bid to evaluate the RBS policies in Norway, Rossow and Baklien found no effectiveness, as the programs failed to realize their objectives of reducing on-premises sales to intoxicated and/or underage buyers. The process assessment showed that the contents of Norwegian RBS programs were restricted and represented only a light version. Furthermore, Rossow and Baklien found that program implementation differed significantly among different bar patrons. For instance, some critical aspects of the programs were never implemented. In other instances, participation was a prerequisite for the extension of opening hours.

The magnitude of effects and consistency of findings suggests the existence of strong evidence of the efficacy of publicized sobriety checkpoints in minimizing alcohol-impaired crash deaths. Bergen

et al. conducted a systematic search for studies published between 2000 and 2012 that assessed the effectiveness of publicized sobriety checkpoint programs. Bergen et al. revealed that publicized sobriety checkpoint programs are effective in reducing alcohol-impaired driving and subsequent road fatalities.

Another review that evaluated multicomponent programs that utilize community mobilization found that the reduction of access to alcoholic beverages, education, sobriety checkpoints, and RBS policy trainings can significantly reduce crashes related to alcohol use (Scherer et al., 2018). However, underage drunk-driving laws have a common limitation in that they focused on the general reduction of crash fatalities associated with DUI as opposed to focusing on the prevention of recidivism (Carpenter, 2007). The studies address recidivism and DUI. Hence, there is need for more research on how recidivism of DUI offenses can be reduced.

DUI presents both the opportunity and need for its prevention. In this regard, government policies and regulations against drunk driving, which are usually enacted by governments, adjudicated by courts, and enforced by the police, need to play a critical role in preventing individuals from driving while drunk. Clearly, legal action cannot effectively solve the issue alone. Other strategies that may potentially lower the issue of DUI are also needed. Therefore, a combination of strategies and laws would have a greater impact (NASEM, 2018).

Numerous studies have found that an increase in the risk of being arrested significantly lowers the rates of driving while intoxicated. One such strategy was the British Road Safety Act of 1967, which stated that when an individual was caught driving with a BAC of 0.08, then it was an offense and that an immediate arrest was warranted (Stuckey et al., 2013). In that instance, BAC was determined through the use of a breathalyzer device called an "Alcotest." The drivers were subjected to the test after

providing reasonable cause, including erratic driving, a moving violation, or a road accident (Hadland et al., 2016).

In cases where the drivers refused the test, it was automatically assumed that they were illegally intoxicated. Although judges were not given discretion in sentencing drunk drivers, drivers were given a mandatory 1-year suspension of their driving license for illegal intoxication offenses (Hadland et al., 2016). This act dramatically revolutionized the behavior of many drivers in Britain. Indeed, the country saw a 23% decrease in traffic accidents within the first 3 months of enactment of the act. By the end of the first year, the percentage of deaths of legally drunk drivers due to DUI dropped to 17% from 27% (Hadland et al., 2017).

Research has suggested that young drinkers who drive are exposed to a higher risk since they do not have enough experience to drive under influence, thus making them a social problem in many countries (Ying et al., 2013). For this reason, some countries, such as United States, have taken a countermeasure of establishing zero tolerance, which includes setting lower levels of BAC for young drivers (Ying et al., 2013). Various studies on zero tolerance have indicated that the zero-tolerance law has had a positive impact especially regarding single vehicle crashes, injuries, and night fatalities as it has significantly reduced the number of young drivers who have recorded negative BAC levels (Ying et al., 2013).

Maryland has established similar programs to the British Road Safety Act. These programs have reduced the number of road fatalities (Stuckey et al., 2013). For instance, various government projects have been developed to increase the risk of arrest and penalization for drunk drivers (NASEM, 2018). The Maryland government has increased its investment in the development of effective rehabilitation

and trial procedures for drunk drivers and public education that aims to lower the rate of accidents that are caused by drunk drivers (Shults et al., 2009).

Research and government reports have indicated that alcohol is a leading contributor to the increased threat to the traffic safety in Maryland and the entire United States (Lacey et al., 2016) When accidents caused by DUIs occur, they lead to loss of lives of not only the drivers, but also other people, such as passengers and passers-by (Grant, 2007). According to Grant (2007), a roadside testing study indicated that on average, 10% to 20% of all drivers have measurable BAC. Therefore, these individuals are likely to be involved in road accidents, even though their drinking may not be the sole cause. Harvard University's David Reed performed a calculation of an accurate estimate of the deaths that could be prevented if there were no drivers who drove after consuming alcohol. This calculation relied on numerous epidemiological studies focusing on DUIs. Grant indicated that Reed performed a comparison of the blood alcohol levels of drivers who were involved in road accidents and those who were not involved and found that about 24% of road accidents would have been avoided if the drivers did not drive after drinking. The high number of road accidents in Maryland due to drunk driving is a clear indication that individuals should not engage in driving while drunk. The CDC (2019) has indicated that, in general, legal codes have specified BAC to be less than 0.02%. Beyond this level, the individual is regarded as legally intoxicated.

However, the studies evaluating various government projects on drunk driving have numerous methodological flaws, including premature program expansion, inadequate controls, and non-comparable sites for the projects. Thus, many have failed in addressing the problem of DUI. For instance, the final report prepared by the U.S. Department of Transport indicated that about 50% of the DUI projects yielded a discernible impact on motor vehicle fatalities that occurred during the night,

which clearly indicated a high level of drunk driving during the night (Porter, 2011). Porter (2011) further noted that only 12 government projects have helped decrease the fatality rate by about 30% on average in the space of 3 years. This rate is broadly comparable to the 30% decline in road accidents recorded in the British program.

Although research has indicated that DUIs are reduced through an increase in the risk of arrest, arrests have a low impact in terms of deterring drunk driving (Miller et al., 2015). Potter (2011), in his support, asserted that effective enforcement of drunk driving laws can deter DUI, reduce road fatalities and accidents perpetrated by drunken driving. However, an increase in surveillance by the police is especially critical at night, when most alcohol-related traffic fatalities occur. In addition, recent research has suggested that the speed with which courts decide cases related to drunk driving substantially affect the effectiveness of laws and regulations regarding drunk driving. However, there are still many questions that research needs to address, particularly regarding the way in which DUI changes attitudes toward drunk driving can be best reinforced.

The relationship between traffic and alcohol may be influenced by the development of strategies because of DUI geared toward altering the behavior of drunk individuals in a given context. One such strategy is the establishment and enforcement of laws that discourage drunk driving. Research has shown that alcohol influences reasoning, visual acuity, balance, and motor skills. The degree of impairment perpetrated by alcohol may vary, especially at lower BAC levels (Rubin & Babbie, 2012). Tests from laboratory experiments have repeatedly indicated that most individuals portray low performance for technical tasks and response time when their BAC increases.

For this reason, the designated level of impairment due to alcohol consumption is formed based on objective evidence regarding the impairment risk at different levels of BAC. There is an inevitable

compromise between public safety on one hand and perceived public acceptability and convenience on the other (Fell et al., 2015). DUI related fatalities have increased in the last decade, as has public awareness. BAC levels have been introduced in most countries that did not previously have limits and countries that already implemented BAC limits have further reduced DUI (Rubin & Babbie, 2012).

Summary and Conclusions

From the literature review, it was evident that DUIs do not only present an individual risk to drunk drivers, but they also exposed other people to danger. It is also important to note that the primary approach to preventing drunk driving is deterrence. In this regard, exploring the effectiveness of RBS policies helped address the problem and effects of DUI. Current literature has provided enough evidence to support the efficacy of deterrence policies on reducing DUI related carnage and fatalities. This has been enhanced by encouraging training bar owners and workers and other stakeholders to perform visible, widespread, and frequent checks along roadways, whereby drivers are randomly directed to stop and provide a breath sample (Shults et al., 2009). There is a gap in the literature concerning training servers and other bar employees on the RBS requirements over the establishment's profit-making agenda, which is at odds with RBS policies. As such, Chapter 3 of this study sought to bridge the gap that exists concerning the efficiency of RBS policies using qualitative research methods. As noted earlier, the use of a portable breathalyzer as a tool for checking drivers' BAC levels has proven to be largely effective in the detection of alcohol-impaired drivers (Fell et al., 2015). If police rely on observational clues, such as the smell of alcohol, glazed eyes, or slurred speech, detecting drunk drivers may prove to be largely unreliable and thus deterrence may be ineffective (World Health Organization, 2004). Responses to drunk driving in many countries have contributed to a partial success story. Therefore, there is a need to enforce the drunk driving legislation to avert injuries and save lives.

Chapter 3: Research Method

The purpose of this study was to explore the extent to which RBS policies and mandated server training have reduced drunk driving among young adults in Maryland. The questions asked addressed the impact of RBS on reducing DUI in Maryland. A qualitative methodology was used. This qualitative approach enabled me to listen to the research participants', especially bar owners' and servers' perspectives regarding their understanding of the RBS policies and server training and how the measures may impact positive behavioral change. The participants' feelings and thoughts about RBS policies and trainings were explored so that the findings could be used to propose suitable recommendations on how to lower the incidence and prevalence of drinking under the influence.

This chapter explains the rationale for qualitative research design for the study. I reintroduce the primary phenomenon being studied, restate the research question, and justify the research approach used. The research questions were used to explore the outcomes of RBS policies and mandated server training in reducing drunk driving among young adults in Maryland. The study considered the participants' views on RBS policies and mandated server training and how RBS policies could be improved to generate positive outcomes in reducing drunk driving. This chapter also explains my role as the researcher in data collection and interpretation and delineates issues of trustworthiness and ethical concerns.

Research Design and Rationale

The interpretative phenomenological analysis approach was used to explore the following research questions:

- R1. How do bar owners, managers, and servers perceive the effectiveness of RBS in reducing drunk driving among young adults in Maryland?

R2. How do bar owners, managers, and servers describe the impact of RBS policies in reducing drunk driving among young adults Maryland?

R3. How can RBS policies be improved to generate positive outcomes in reducing drunk driving in Maryland?

The nature of the study was qualitative. According to Creswell (2007), qualitative study is conducted when a problem needs to be explored. The primary objective is to explore the effectiveness of RBS policies. I conducted interviews to understand the impact of RBS policies on DUI. Qualitative design uses data that are not numerical. It involves the use of interpretative and naturalistic approaches in natural settings in order to grasp the meanings that respondents attribute to their experiences and feelings (Smith, 2015). The study sought to explore the effectiveness of RBS policies on drunk-driving prevention in Maryland by using an interpretative phenomenological analysis.

The interpretative phenomenological analysis is a qualitative analysis approach with a psychological interest on how individuals make sense of their own experiences (Larkin & Thompson, 2012). The interpretative phenomenological analysis researcher's aim is to develop an understanding of how people experience a major event in their lives (Oxley, 2016). The primary goal is to determine what is important to participants and explore its meaning to the participants, given the participants' context and interest (Larkin, 2015). According to Smith et al. (2009), interpretative phenomenological analysis is suited to the concepts of positive psychology and can support the explanations of positive psychology.

Various qualitative approaches are potentially helpful in exploring the experiences of young drivers regarding the effectiveness of RBS policies on drunk driving prevention. The interpretative phenomenological analysis approach was selected based on the purpose of the study and the nature of research questions. The aim of the study was to explore the effectiveness of RBS policies on drunk

driving prevention in Maryland. The interpretative phenomenological analysis helped in developing an understanding of how bar patrons, club owners, and bar servers perceive the impact of RBS policies on young people's lives. The main objective was to determine the effectiveness of RBS policies according to participants' views and explore its meaning to the participants, based on their interest.

Apart from interpretative phenomenology, idiographic and hermeneutics are other important research methodologies. Hermeneutic phenomenology emphasizes contextual meanings by interpreting participants' views. It also recognizes that researcher's perspectives of the world are intertwined with the manner in which they interpret the participants' experiences (Oxley, 2016). The study aimed to understand servers' perspectives rather than attaching contextual meanings to participant's views on the effectiveness of RBS on DUI. Hence, hermeneutic phenomenology was not appropriate for the study. Heuristic inquiry focuses on intense experiences from the participants' point of view; the researcher should possess personal knowledge and exhibit interest in the problem being studied (Patton, 2002). Heuristic inquiry challenges scientific concerns regarding a researcher's detachment and objectivity (Smith et al., 2009). According to Oxley (2016), the idiographic method of the interpretative phenomenological analysis focuses on specific experiences in a given context. This approach assumes that each case must be studied independently by examining the common and distinct features in the entire group. The study generalized research findings hence the idiographic approach was not appropriate.

Role of the Researcher

According to Miles et al. (2014), the role of a researcher in qualitative inquiry is to engage in the research during data collection and analysis. In light of this, I conducted interviews in order to collect the participants' perspectives. Although the interpretative phenomenological analysis is experientially

focused, Smith et al (2009) opined that a researcher can only understand the participants' experiences by exploring what they say, since a researcher cannot share their experiences. Smith et al. further asserted that participants are considered to be knowledgeable about their experiences, and interpretative phenomenological analysis provides them with the opportunity share their own stories.

I ensured that I did not have any relationship or prior knowledge of the participants in any of my selected sites for recruitment of participants. I identified my interviewees, obtained their written consent to participant in the study, and located a quiet, suitable place for conducting the interviews. In particular, I interviewed servers working in establishments within Baltimore City, Maryland. The establishments must have been in operation for at least 5 years and have more than five servers per shift. Moreover, the establishments must have high traffic. I was courteous and professional in my conduct and audiotaped the questions and responses with initial informed consent obtained from the participants.

As an alcohol and substance abuse therapist who has treated DUI offenders, I was biased. However, I was motivated to pursue the topic because of my professional encounter with young drivers charged with DUIs. I felt the urge to explore and understand the perspective of bar owners and servers regarding the effectiveness of RBS policies in preventing and controlling incidents of DUI. The primary challenge faced by researchers utilizing phenomenological analysis is how to stifle the knowledge derived from personal experiences and identify ways to embrace new ideas (Finlay, 2014). With this in mind, I documented my experiences in a reflective journal to minimize personal biases. Smith et al. (2009) posited that developing a journal is important during the data collection and analysis stages of interpretative phenomenological analysis.

The study was conducted on people dealing with young drivers in the state of Maryland. For inclusion into the study, a participant must have attended RBS training programs in the State of

Maryland. I sought Walden IRB clearance (Approval no. 12-11-20-0153257) before collecting data from the target participants. The board is an administrative body created to protect the rights plus welfare of persons recruited to take part in a research activity. Studies with human participants must be conducted under the auspices of the university's IRB (Greene & Geiger, 2006).

Participation was voluntary, and I assured the participants that their responses would be confidential. Because participation is voluntary, I anticipated that some participants might withdraw from the study. I also informed them that they would not receive any preferential treatment for participating in the study. A compensation of a \$10 gift card was given to the participants for their effort and time spent on participation, which took approximately 60 minutes per participant. The payment amount was anchored on the average hourly wage in the area in which the study was conducted. The payment was deemed acceptable, as it did not exert undue pressure on the participants. It was anticipated that the level of payment was not so high as to cause the participants to take risks or participate in a study that they strongly opposed based on personal values and beliefs. The participants signed a confidential statement at the beginning of the study, and I ensured that I received an informed consent form from the participant before proceeding with the study.

Methodology

This section consists of the rationale for selection of the research participants, instrumentation, the recruitment procedures, participation and data collection, and data analysis plan. It also includes discussion of trustworthiness issues. The section concludes with a summary section highlighting various aspects of the chapter. Each subsection includes sufficient supporting details to provide readers with the processes and procedures necessary for future studies.

Rationale for Participant Selection

The study was conducted on young adults living in the southern suburbs of Baltimore City, especially bar owners and alcohol servers/service staff. Bar owners and servers were included in the study because they interact with young people from all walks of life drinking alcohol for various reasons and are in a better position to provide recommendations on how to enhance the effectiveness of RBS policies. Patton (2002) asserted that persons who have gone through an event can detect the purpose of a phenomenon. The proposed age group included persons aged 18 years and above, and the participants were males and females.

I also provided flyers to bar owners and alcohol servers detailing the nature of the study and qualifications for participants' involvement. These flyers were shared during one of my site visits to bars and the organization. Each flyer had my contact numbers, instructing interested participants to contact me. During subsequent visits, interested participants were identified and interviewed about the effectiveness of RBS policies in Maryland. For this reason, I sought approval from the Walden University IRB. The inclusion criteria included at least a high school diploma and steady employment. This demographic was chosen to achieve homogeneity of research participants, which Oxley (2016) claimed is crucial in conducting interpretative phenomenological analysis.

Following recommendations from the interpretative phenomenological analysis researchers, 10 participants were selected for interviews based on their understanding of the RBS policies. Oxley (2016) indicated that interpretative phenomenological analysis is mainly concerned with the details of lived experiences being studied. Smith (2015) indicated that the focus is on the depth and quality of a narrative, rather than the number of participants. Thus, a small number of interviewees is recommended.

Smith et al. (2009) advised researchers to use between three and six interviewees with a maximum of 10 interviews performed.

The justification for a sample size of 10 participants was the quality of data analysis, the availability of time and resources, and the availability of participants. I was also not likely to be overwhelmed by amount of data collected from participants. Although this exceeded Smith et al.'s (2009) advice of interviewing between three and six participants for a comprehensive phenomenological study, it reflected the aim of the study to explore the details of experiences. According to Smith et al., an interviewer can delve into deeper details to explore a problem with a small number of interviewees.

Instrumentation

The main objective of an interpretative phenomenological analysis study is to elicit detailed and rich firsthand accounts of experiences of the problem under study (Smith et al., 2009). In light of this, I developed sub questions around the positive emotion, engagement, relationships, meaning, and accomplishment (PERMA) theory to initiate the data collection process. The objective of the theoretical framework was to uncover ideas that enable the researcher to gain deeper understanding of a phenomenon (Agee, 2009). I also used semi structured interviews as the primary source of data. It was anticipated that the use of semi structured interviews would enable the interviewees to engage in friendly interaction and answer questions in an effective manner. Each interpretative phenomenological analysis interaction took at least 60 minutes to facilitate development of trust between the respondents and the interviewer.

Recruitment Procedures, Participation, and Data Collection

Researchers who perform qualitative studies using vulnerable populations usually have some challenges (Ellard-Gray et al., 2015). Discussing sensitive issues may make participants question the

study's confidentiality (Kaiser, 2009). Thus, Creswell (2007) recommended developing rapport with the participants before recruitment, allowing participants to feel a sense of ownership in the entire process, and establishing trust with participants by using polite language when recruiting participants.

The participation process was voluntary and interested participants could contact me using information provided on recruitment flyers. I verified inclusion criteria during the initial contact with each prospective participant. Individual meetings with participants were scheduled to review the study's purpose and read and sign an informed consent form before proceeding with the interview. The interviewees were informed of all the data collection procedures so that they knew what to expect. Each interviewee was debriefed at the termination of an interview. Miles et al. (2014) noted that the purpose of debriefing is to uncover possible harm and distress and to further educate the participants about the purpose of a study to clear up any confusion.

With regards to data collection, I utilized semi structured interviews. The length of each interview was approximately 60 minutes, but I extended the duration depending on the willingness of a participant and the nature of data being collected. Each participant was required to provide written informed consent statement, as they were expected to share comprehensive personal experiences. I recorded and transcribed all interviews with the participants' permission. I listened to each recording and read the transcribed texts to verify data accuracy. I then coded the interviews based on topic, issues similarities, and differences that were revealed through the participants' narratives. This process enabled me to begin to understand the world from each participant's perspective. Whereas coding can be done by hand on a hard copy, used NVivo software (version 12) to help manage my transcriptions.

Data Analysis Plan

The data gathering process was conducted using a semi structured interview protocol. Each interview was audiotaped and transcribed into text to facilitate analysis. Smith et al. (2009) indicated that verbatim transcription is often used in the coding process in qualitative studies. During the reading and the rereading processes, I coded the raw data to facilitate merging of themes. Research participants took part in the reviewing process of interview transcripts for accuracy purposes. I took notes to find strong themes and look for connections across various themes before moving to the next interview. According to Onwuegbuzie and Leech (2007), an analysis of discrepant cases adds to data credibility. In this regard, I identified and explored possible discrepant cases in the study during member checking to identify possible researcher bias. I also documented the possible discrepant cases to enable readers evaluate the cases and derive their conclusions.

Issues of Trustworthiness

This section provides information concerning the credibility of the study (see Agee, 2009) and discusses issues related to the credibility, transferability, dependability, and confirmability of the study. I adopted well-organized research methods, a theoretical framework for the formulation of research questions, member checking, and data triangulation to ensure the credibility of the study. Participants read the findings' summary for member checking. Chang (2014) indicated that the member checking process facilitates active participation by respondents in a research process.

For data triangulation collection, I used reliable sources of data collected from interviews, coding procedures, site visits, and repeating the analysis. Self-reflection was also be used to enhance the credibility of the study. For the transferability of the study, I provided sufficient information relating to the context, process, participants of the study, and researcher-participant relations to help readers

determine how the findings could be transferred. A thick description of the participants' views about the impact of RBS in reducing DUIs was used to promote transferability.

To ensure dependability, I used an audit trail, managed and coded field notes, secured the database, and noted possible influences on data gathering and analysis. Data analysis neutrality was achieved via a confirmability audit. The study's audit trail consisted of raw data, a data analysis plan, transcript records, and personal notes recorded in a field journal.

I considered a few ethical considerations such as minimization of the risk of harm and informed consent in carrying out the study. I did not engage in actions that could harm research participants both physically and emotionally. In addition, I did not invade participants' privacy. After obtaining participants' informed consent, I protected their anonymity and provided them with the right to withdraw from the study at any time.

Summary

This chapter identifies interpretative phenomenological analysis as the appropriate approach for the study. A justification for this approach and the role of a researcher was provided. The chapter also discussed the recruitment and selection strategy of research participants and the instruments utilized for data collection and analysis. A semi-structured interview approach was described as the appropriate method for exploring participants' experiences. The chapter also addresses the trustworthiness issues and concludes with a summary of issues addressed in the chapter.

Chapter 4: Results

The purpose of this study was to determine the effectiveness of RBS policies as reported by study participants in the prevention of drunk driving-related injuries and deaths in Maryland. The study sought to provide information on the extent to which RBS policies have reduced drunk driving in Maryland, the outcomes of the implementation of RBS policies, and how RBS policies can be improved or modified to prevent drunk driving-related injuries and deaths. The study also sought to explore the server's understandings and opinions about RBS policies.

Pilot Study

A pilot study was conducted by implementing a small-scale methodological test to prepare for the main study. This was aimed at ensuring that the methods or ideas would work in the real-world research practice. Since the pilot study also involved using a small sample, it was used to guide and inform the main study. The pilot study took 1 day and involved five servers aged between 18 and 35 years old. They had worked for at least 3 years in a busy bar. One of the key issues noted during this stage was the reluctance by servers to participate in the study without their employers' authority. In addition, the respondents were more concerned about their privacy and confidentiality. The principal benefit of performing a pilot study is understanding the opportunity to make adjustments and revisions for the main study. Therefore, the pilot study acted as a feasibility study for testing the research protocols, such as data gathering models and a sample recruitment strategy. It was also utilized to examine the practicability of the proposed research process, which included its cultural and local contexts.

Setting

Research setting refers to the physical, social, and cultural sites where a scholar conducts a study. The identification of research settings is vital since the outcomes, and their interpretation may be heavily reliant on it. In this qualitative study, for example, the emphasis of the setting is placed on meaning-making. Therefore, the settings for this study are the suburbs of Baltimore City, Maryland. More specifically, the research targets areas such as clubs, alcohol service facilities, and entertainment areas.

Demographic

The target population was comprised of young adults living in the southern suburbs of Baltimore City, particularly bar patrons, club patrons, and alcohol servers/service staff. Bar owners and servers were also included in the study because they interact with young people from all walks of life drinking alcohol for various reasons. Moreover, they are in a better position to provide recommendations on enhancing the effectiveness of RBS policies. The initial number of prospective participants was 13, but upon scrutiny, it was determined that three did not meet the requirements for participation. Specifically, two of the prospective participants were aged below 18 years, and the other one was not of sound mind.

Data Collection

Semi structured interviews were used as the primary data gathering tools. This method was crucial in eliciting more in-depth responses from the participants. Therefore, the interviews were designed to determine what has changed due to the implementation of a particular policy and its potential impacts. In addition, the qualitative interviews utilized open-ended questions to generate long-form written and typed answers. These questions sought to reveal the participants' opinions, experiences, narratives, and accounts with respect to the efficacy of RBS policies in reducing drunk driving.

Data Analysis

The data gathering process was conducted using a semi-structured interview protocol. Each interview was audiotaped and transcribed into text to facilitate analysis. Smith et al. (2009) indicated that verbatim transcription is often used in the coding process in qualitative studies. During the reading and rereading processes, I coded the raw data to facilitate merging themes. Research participants took part in the reviewing process of interview transcripts for accuracy purposes. Before moving to the next interview, I took notes to find strong themes and look for connections across various themes. According to Onwuegbuzie and Leech (2007), an analysis of discrepant cases adds to data credibility. In this regard, I sought to identify and explore possible discrepant cases in the study during member checking to identify possible researcher bias.

Evidence of Trustworthiness

This section provides information concerning the credibility of the study (see Agee, 2009) and discusses issues related to the credibility, transferability, dependability, and confirmability of the study. I adopted well-organized research methods, a theoretical framework for formulating research questions, member checking, and data triangulation to ensure the study's credibility. Participants read the findings' summary for member checking. Chang (2014) indicated that the member checking process facilitates active participation by respondents in a research process.

For data triangulation collection, I used reliable sources of data collected from interviews, coding procedures, site visits, and repeating the analysis. Self-reflection was also used to enhance the credibility of the study. For the transferability of the study, I provided sufficient information relating to the context, process, participants of the study, and researcher-participant relations in order to help readers determine

how the findings can be transferred. I used a thick description of the participants' views about the impact of RBS in reducing DUIs to promote transferability.

To ensure dependability, I used an audit trail, managed and coded field notes, secured the database, and noted possible influences on data gathering and analysis. Data analysis neutrality was achieved via a confirmability audit. The study's audit trail consisted of raw data, analysis plan, transcript records, and personal notes recorded in a field journal.

I considered several ethical considerations, such as minimizing the risk of harm and informed consent in carrying out the study. Regarding minimizing the risk of harm, I avoided physical harm and psychological distress to research participants. In addition, I avoided invasion of participant's privacy. After obtaining participants' informed consent, I protected their anonymity and provided them with the right to withdraw from the study at any time.

Results of Server Training in Maryland

This section describes the results obtained from the qualitative analysis using the NVivo software tool. When asked whether they were aware of responsible beverage training, all the research respondents indicated they had heard about responsible server training. Some stated that they acquired the information from their place of work, from friends, and through other sources of information such as social media and seminars. Others stated that they learned about responsible beverage training from print media such as newspapers and magazines and tools mass media such as radio and television.

Of the ten individuals who took part in the survey, only one had not attended the server training program. The respondents provided different reasons for attending server training programs, including the desire and need to become better bartenders. Others attended server training programs because it was an important requirement from their employers. Other reasons provided for attending server training

programs included the need to increase skills in dealing with intoxicated individuals and the desire to further their careers.

When asked about the place they had attended server training programs, the respondents provided different locations. Although some indicated attending such programs in the state of Maryland, others indicated other regions. Specifically, some of the other areas provided by the respondents included the state of Virginia, the District of Columbia, New York, and Texas. Some of those who attended their training in Maryland indicated that they did so while at their current workplace. Others attended while working for their previous employers, whereas others attended while not yet employed. The majority of the respondents indicated a lack of enough institutions offering server training programs as a significant hindrance towards their quest to reducing the effects of drunk driving in the state of Maryland. They indicated that they had to drive for at least 15 miles to attend such institutions. Other institutions are located as far away as 25 miles. However, others indicated that they did not know of any nearby server training location.

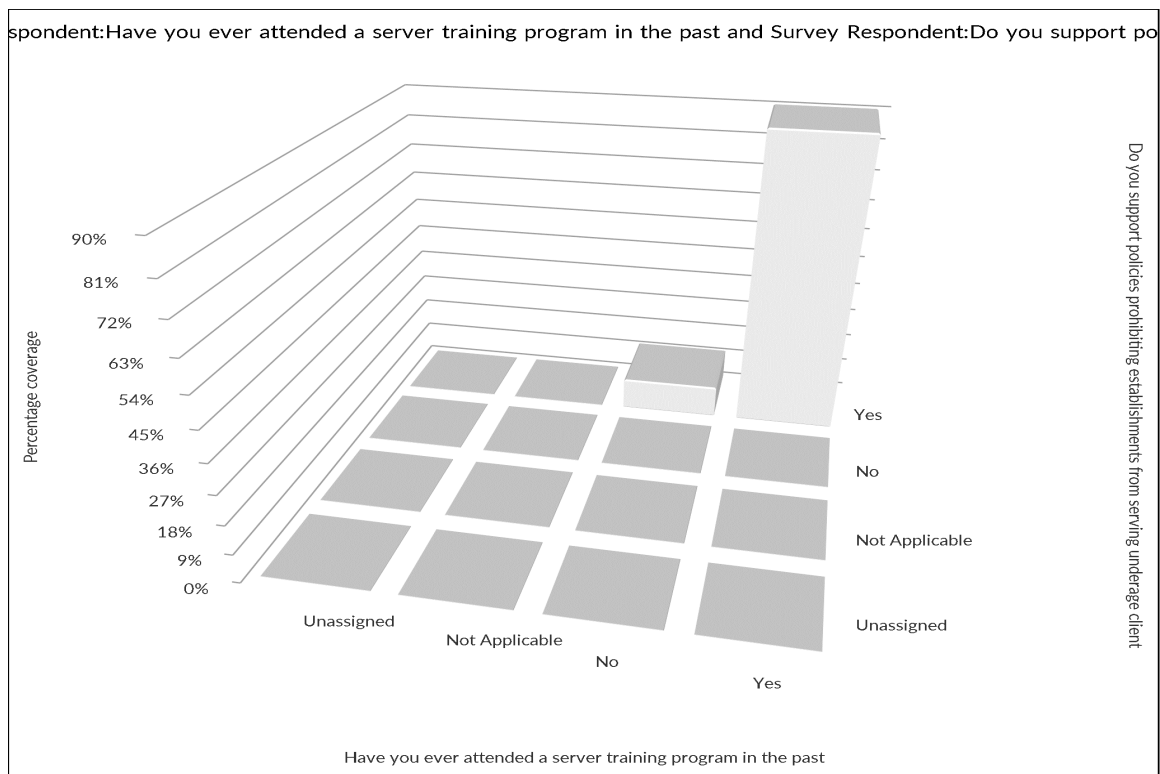
The respondents indicated that they had attended numerous server training programs during their time of employment. They had participated through online programs, safe communities, and training for intervention procedures. Moreover, they indicated that they had attended the serve safe programs. Overall, they chose the type of training to attend. Nonetheless, the employers also played significant roles in the type of training attended by their employees. When asked whether they knew about the existence of online server training programs, only a small number of participants were aware of such programs. Some indicated that they were hearing about the existence of such programs for the first time.

There was an assurance from the participants that they support policies prohibiting establishments from serving underage clients as most of them attended the training and learned about the

policies developed in Maryland (see Figure 2). Those who attended server training programs indicated that they acquired vital knowledge during such classes. Some of the common topics covered during training include the need for establishments to implement policies and policies relating to underage and intoxicated customers. Servers also must ensure compliance with such policies and procedures.

Figure 2

Server Training Versus Policy Support



They also learned how to recognize underage customers by checking their IDs. Other vital topics covered during server training programs include the need to decline service to intoxicated clients, strategies for handling intoxicated customers, and an understanding of phases of intoxication. The other topics of significance learned from such programs include recognizing intoxicated individuals and delaying service to prevent and control drunkenness. Servers indicated learning how to prevent intoxicated clients from driving and the benefits of offering alternative transportation to intoxicated

individuals. The other topics covered by the beverage server training programs include the need to serve alcoholic drinks with food and applicable drinking and driving laws in Maryland. Overall, the respondents considered these topics very important in the fight against drunk driving in the state of Maryland.

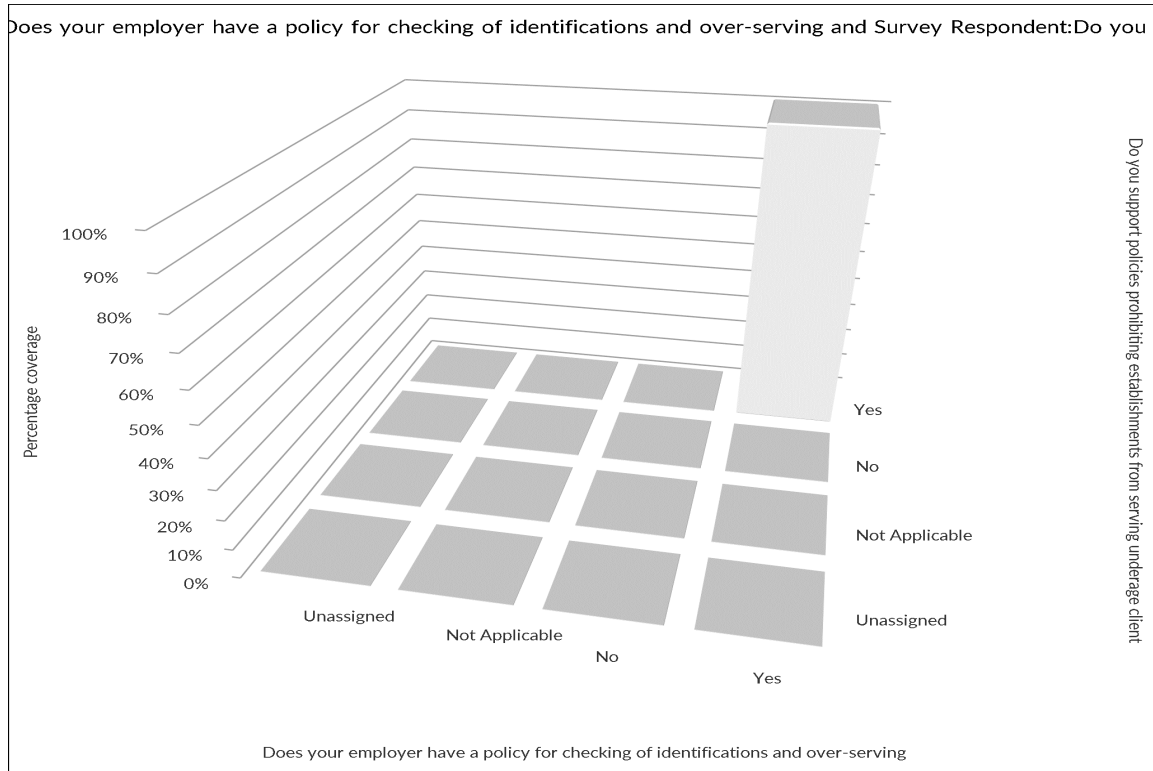
Concerning the delivery method, those who attended server training programs indicated lecture, role play, leader facilitated interactions and reading materials as some of the most-used presentation techniques in learning institutions. They considered role play as the most effective approach, followed by leader-facilitated interactions. The majority of the respondents considered lecturing and reading materials as less effective.

Only a few respondents indicated asking for identifications in case they had doubts about a patron's age. Nonetheless, a majority stated that they knew how to detect intoxicated customers and acknowledged that all establishment owners must attend beverage training programs. Moreover, there was a joint agreement that beverage servers should attend alcohol beverage server training. That is because such training help servers in determining underage clients. Most importantly, the majority of the respondents acknowledged that it is the responsibility of the servers and establishments to ensure that customers do not drink and drive. Although there was agreement that it is important to decline service to underage clients, some respondents indicated that they feared asking for IDs. Some indicated that they were reluctant to refuse service to apparently intoxicated and underage clients because they feared offending clients.

As shown in Figure 3, all participants agreed that their employers had a policy on checking underage identification and overserving.

Figure 3

Employer Policy on Checking of Underage Identification and Over Serving

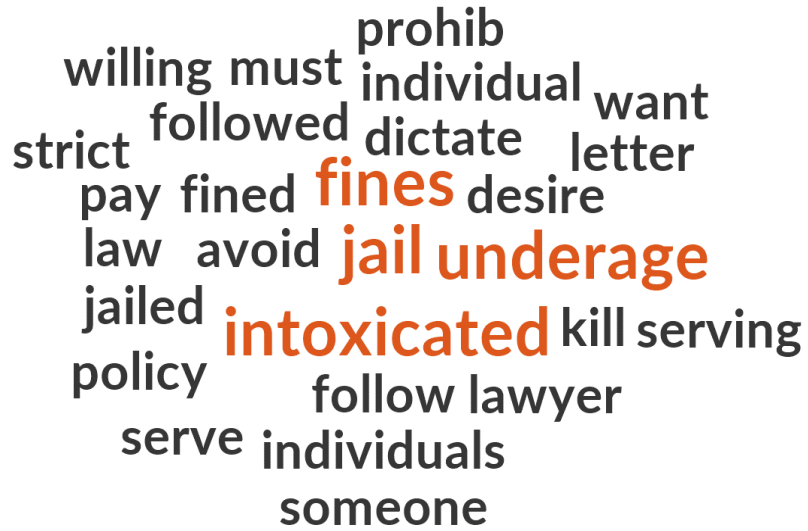


Thematic Analysis

Figure 4 shows that a number of themes can be established from the word frequency query. Jail, intoxicated, underage and fines are major themes established from the survey.

Figure 4

Word Frequency Query for Major Themes



Serving Alcohol to Intoxicated Individuals' Policies in Maryland

Alcohol intoxication is one of the major themes that can be deduced from the word count frequency analysis. Every US state has provisions that allow an injured individual to seek compensation from a person or company legally guilty of the accident. However, if the individual who caused the injuries was poisoned at that time, many countries allow the wounded person, at least under certain conditions, to claim reimbursement from the alcohol supplier or the social host who provided the drink. These types of claims are usually known as “dram shop” claims against alcohol merchants. Sometimes a third-party liability action is referred to as a “social host liability” claim. The legislation of Maryland provides for minimal social host responsibility. A social host is accountable for the harm done by a minor guest to whom the social host deliberately supplied alcohol.

Laws Against Serving Underage and Intoxicated Individuals in Maryland

Most participants agreed that they could not serve an underage or intoxicated individual alcohol because it is against the law. They indicated that it was a criminal offence for businesses to sell age-restricted products such as alcohol, cigarettes, knives, and fireworks to people too young to buy them legally. It was also illegal to sell videos and computer games to persons under the classified age. Offenders would be fined and could face prison terms. The respondents also indicated that it was unlawful to “supply” alcohol to a minor with the same family or religious exceptions mentioned above. Furnishing meant that a server deliberately supplied alcohol to anyone under 21 for their consumption. However, it was also prohibited to have alcohol. They were allowing and approving alcohol service to underage and intoxicated individuals.

Fines and Jail Terms for Serving Underage and Intoxicated Individuals in Maryland

All the liquor-serving individuals agreed that they would not sell it to intoxicated individuals or minors for fear of being fined or facing a jail term. The Maryland Criminality Code forbids alcoholic supply, delivery, or supply for adults with reasonable reason to know that the beneficiary is a juvenile and allows a minor to possess or consume alcohol “wittingly and voluntarily” at a residence owned or administered by the adult. The law also includes heightened penalties if adults infringe those regulations, resulting in a minor motor vehicle accident, severe physical injury, or death after alcoholic beverages were consumed.

However, three exceptions to the rule are recognized by Maryland:

1. The minors can use alcohol provided by an adult direct family member, as long as the alcohol is owned and consumed in the adult’s own home or property.
2. A minor may possess or consume alcohol as part of a religious ceremony, like in a Catholic Mass.
3. A minor employee of an establishment authorized to sell alcohol may own or control alcohol but cannot consume it during work and regular hours.

Summary

This chapter discussed the settings, demographic features, the data collection, and data analysis for this study. The section also discussed matters relating to evidence of trustworthiness. Moreover, the chapter discussed the study results based on the three themes of serving alcohol to intoxicated individuals’ policies in Maryland. The other themes included laws against serving underage and intoxicated individuals in Maryland and fines and jail terms for serving underage and intoxicated individuals in Maryland.

Chapter 5: Discussion, Recommendations, and Conclusions

This research study focused on determining the effectiveness of RBS policies as reported by study participants in the prevention of drunk driving related injuries and deaths in Maryland. Using a qualitative design, the study aimed at answering three research questions:

- R1. How do bar owners, managers and servers perceive the effectiveness of RBS in reducing drunk driving among young adults in Maryland?
- R2. How do bar owners, managers and servers describe the impact of RBS policies in reducing drunk driving among young adults Maryland?
- R3. How can RBS policies be improved to generate positive outcomes in reducing drunk driving in Maryland?

Discussion of Findings

Research Objective 1

The objective of the first research question was to understand participants' perceptions on the effectiveness of RBS in reducing drunk driving among young adults in Maryland. Generally, it was found that servers and patrons attended server training programs because it was a requirement by their employers, and they wanted to become bartenders. Others attended server training programs in search of flexibility and more income, new skills, and certification. Those who had participated in server training programs acquired significant knowledge and skills necessary for their jobs. They learned about legal requirements, mixing, and patron LaPorte, and recognizing intoxicated persons. Other essential knowledge acquired from server training programs includes age requirements and checking customer identification numbers during service delivery.

In the domain of strategies used to determine intoxicated customers, it was found that servers rely on observation and on back techniques such as slurred speech and buying rounds. Those who had attended server training programs reported using different strategies to stop service to already intoxicated customers. They relied on management support and gave water, food, or coffee to intoxicated customers. Servers and patrons also used communication and repartee when dealing with intoxicated customers. In some cases, servers reminded patrons about regulations. Some servers use cut-off and last-call strategies when serving intoxicated customers.

However, servers indicated facing various challenges when applying the acquired knowledge and skills. In particular, they struggled with frustrated and aggressive customers. Moreover, they feared losing control of the bar to intoxicated customers. As a result, they recommended anger management to customers to improve server training programs. Other recommendations included identification of fake IDs, wine packing, more verse-on-hour bans, and identification of other intoxication patterns. Managers and establishment owners should also back up their employees when applying the knowledge and skills acquired during RBS training.

Servers and managers of bars are key players in ensuring and enhancing RBS and preventing the overservice of alcoholic drinks to intoxicated persons. Their perceptions about RBS program could play a greater role in reducing DUI cases. Also assessing the practices, attitudes, and perceptions of establishment employees concerning RBS may inform future RBS training programs. For instance, Gehan et al. (1999) conducted a focus group discussion with bartenders, bar owners, bartenders, and managers that enhanced alcohol management programs. In particular, results from the study informed the development of the Enhanced Alcohol Risk Management and the Alcohol Risk Management programs. According to Toomey et al. (2017), the Alcohol Risk Management and the Enhanced Alcohol

Risk Management programs promote the development of RBS programs for bars and restaurants. The social cognitive theory helped with the development of the two programs and the questions used in the focus groups. Discussions addressed the environmental, personal, as well as behavioral factors that affect responsible alcohol service.

Personal factors consisted of employees and managers' understanding of alcohol control laws, attitude toward not serving intoxicated customers, perceptions of personal liability, perceptions about law enforcement by managers, and experience with training programs. Behavioral factors consisted of servers' ability to cut off service, servers' experience with cutting off service, and managers' capability to implement RBS policies. Environmental factors included issues that influenced sale of alcohol such as establishment-specific policies, legal and liability environments, as well as backing up servers. Servers were hesitant to cut off service because of fear of the customer becoming angry and fear of losing tips. Servers also reported different levels of management support, with some indicating that their managers lacked adequate knowledge of how to deal with customers. Some owners lacked formal management training, and some establishments did not have responsible alcohol beverage service policies. Although the respondents reported few consequences for serving intoxicated patrons from law enforcement agents, most feared being sued for serving intoxicated customers under the dram shop law (Gehan et al., 1999).

Ecklund et al. (2017), in a study about servers' perceptions and attitudes toward RBS programs, identified negative perception toward online RBS program training. In particular, servers said that they did not acquire any new knowledge, that the online training program was boring, and that most trainees just passed over the content. Moreover, most servers indicated that their employers did not compensate them for going through online training. On the contrary, many of the research participants indicated that

they preferred in-person trainings, particularly when engaging in active discussions. Toomey et al. (2017) also noted the inefficiency of online RBS training programs in changing servers' behavior around cutting off intoxicated customers.

Ecklund et al. (2017) found that while servers and managers feared repercussions from law enforcement agents for selling to intoxicated and underage customers, none had heard of any server or manager obtaining a citation for overservice. Wheeler et al. (2000) asserted that effective strategies for limiting overservice are lacking and resource intensive, which limit their use by police officers and other law enforcement agencies. Until servers and managers perceive that there are legal consequences for serving intoxicated customers, RBS policies will not have maximum effects.

Various states require servers to attend RBS training programs to fulfill legal requirements. By 2016, 13 states including the District of Columbia had enacted mandatory service training laws while 20 had voluntary RBS training laws. Six states had a combination of the two and 12 had no RBS laws (APIS, 2016). For instance, the State of Illinois enacted the Public Act 99-0046 in July 2015 to regulate beverage service in establishments. Specifically, the law requires alcohol servers and those checking IDs for alcohol service on-premise establishments to undergo a Beverage Alcohol Sellers/Servers Education and Training (BASSET) training after every 3 years (Prevention First, 2021). In 2017, California passed the Responsible Beverage Service Training Act of 2017. This law requires alcohol servers and bar managers to attend RBS training programs and pass an examination by July 1, 2021. The law aims at educating alcohol servers on the negative effects of over-serving alcohol to patrons. Thus, it aims at curbing alcohol-related injuries and deaths within local communities, especially with respect to drunk driving as well as alcohol-related crimes. It also creates a statewide mandate for bar establishments plus a new training requirement for alcohol servers and managers (California State, 2021).

Concerning skills acquired from RBS training programs, Prevention First (2021) indicated that RBS training programs provide owners, managers, and servers with the knowledge and skills needed to serve alcohol responsibly as well as meet the legal requirements of alcohol service. Normally, training programs for managers and bar owners offer guidance on how to implement service policies and practices. RBS training programs for servers dwell on the knowledge and skills required to enhance their ability in preventing excessive alcohol consumption among patrons. Also, servers acquire the knowledge and skills required to reduce harms associated with excessive drinking. The National Academies of Sciences, Engineering and Medicine (2018) indicated that RBS training programs offer the training to help those selling and serving alcohol with the knowledge as well as skills to serve alcohol responsibly. Managers use compliance checks to ensure servers follow the law, check IDs, and do not sell alcohol to underage youth. Thus, RBS training programs should have the enforcement aspect of compliance checks.

For effectiveness, states with RBS training programs can provide incentives to retailers such as the defense in dram shop liability lawsuits, mitigation of fines, and discounts for dram liability shops. However, protection from dram shop liability insurance incentives can result in unintended consequences. In particular, these protections can impair the effectiveness of dram shop laws, which have proven effective in minimizing alcohol related injuries and death (NASEM, 2018). Drinking establishments can avoid dramshop liability by ensuring that servers do not over-serve patrons to an extent where they can harm themselves or others. Servers can use various approaches to intervene on behalf of patrons. For instance, they can make it inconvenient or unacceptable for a patron to drive while drunk. Also, they can arrange for a taxi to take a patron home or suggest that a patron wait to sober up. Servers can decide to physically restrain a patron or report to the police those insisting on driving drunk.

However, any of these measures can mean lower profits. To servers, these measures can mean the inconvenience of arranging for a taxi or a place to stay. Servers also must deal with the sheer unpleasantness of telling patrons that they are incompetent to drive. Thus, servers require special training to carry out these tasks effectively (Rammohan et al., 2011).

Mosher et al. (2002) examined mandated and voluntary RBS policies and developed recommendations for legislation as well as minimum program requirements. Specifically, the program should provide comprehensive information that is relevant to servers. Content covers include age identification, spotting false IDs, signs of intoxication, and pacing drinks to prevent intoxication as well as cutting off service to intoxicated patrons. It is also important to include information underscoring the value of providing RBS, such as risks for the patron and for the community, the negative effects of alcohol on the human body, drunk driving, and increased crime, as well as vandalism. Moreover, programs should cover knowledge of state laws concerning alcohol, penalties for violation, plus insurance and liability issues.

Tommy et al. (2001) indicated that RBS training programs should focus on skills development activities. In addition to knowledge, servers and managers require a chance to acquire and practice skills via role-playing or other techniques. In this case, programs should include techniques for refusing service and sales, as well as how to deal with confrontation. Continuous practice of these skills is essential to help servers and managers develop the confidence needed to apply such behavior when they are at their places of employment.

Concerning the length of training, Mosher et al. (2002) recommended that RBS training should last at least 4 hours to adequately cover the knowledge as well as skills components to practice. Generally, shorter programs dwell on knowledge only by using written materials or videotapes. Such

approaches do not provide adequate time for trainees to practice the acquired skills and discuss key issues before returning to their places of work where they are expected to apply the training. Managers and bar owners require extra training in addition to the minimum four-hour required for servers.

RBS training programs should also include administrative procedures and policies. Experts recommend the need for appropriate criteria and procedures to certify or license training programs, trainers, and trainees. They also advocate for re-certification of RBS programs, trainers, alongside trainees, and the need for licensees to submit documentation regularly indicating that their employees have obtained the required training. Moreover, they recommend the implementation of policies that reduce turnover, promote periodic refresher training, and support in-house enforcement as well as supervision (Mosher et al., 2002).

Most importantly, research findings show that RBS policies are more effective when owners, servers, and managers expect that those who fail to comply with the laws will face significant consequences. Research studies on RBS programs have found the same result, particularly in the presence of mandated policies and active enforcement. Normally, establishments impose penalties only on the server. However, managers and licensees must be held accountable. Moreover, it is important to monitor trainers and training programs to ensure compliance with established standards and requirements. Normally, law enforcement officers focus on enforcement; nonetheless, management can introduce procedures to monitor employee performance. For example, management can use “secret shopper” initiatives to examine compliance with organizational policies (Mosher et al., 2002).

In addition to bar owners and managers taking part in RBS training programs, training programs should focus on policy development for bar managers. Establishments can benefit from policies and practices that reinforce and complement RBS programs and laws. For instance, management can require

servers to check IDs for patrons below the age of 30 or enact practices that foster safer environment such as barring of intoxicated individuals from accessing the establishment. Owners can also prohibit illegal practices in their establishments. They can take appropriate action to establish a safer environment in their businesses. For instance, some bars have crowd control policies for people waiting to enter the establishment, restroom hallways, or sufficient lighting in parking areas (Hoover, 2003).

Research Objective 2

Another objective of this study, as encapsulated in the second research question, was to explore the impacts of RBS policies in reducing drunk driving among young adults in Maryland. It was found that RBS policies play significant roles in reducing drunk driving among young adults in Maryland. This was because servers and patrons considered several factors before serving a customer. Specifically, they considered a customer's age, current consumption levels, pregnancy status, medical status, and customer's attitude. Moreover, it was found that overserving policies and age identification were relevant as far as the impact of RBS policies in reducing drunk driving among young adults in Maryland was concerned.

Thus, the respondent indicated that there was a need to create policies prohibiting the selling of alcoholic beverages among underage clients to reduce drunk driving in the state of Maryland. It was found that servers and patrons feared serving underage customers because they feared going to jail, unethical, and fear of responsibility. Other reasons for not serving underage customers include

- Illegality
- Lack of capacity to regulate behavior
- Customers' inability to make sound decisions
- Loss of employment

- Closure of business

Studies assessing the effectiveness of RBS training programs have yielded inconsistent outcomes. Community Health Rankings and Roadmaps (2021) indicate that RBS training programs can help in reducing harmful alcohol consumption. Specifically, RBS programs can enhance server policies and play a significant role in reducing the number of patrons leaving their drinking establishments intoxicated. The training can also reduce over-service to intoxicated patrons. Moreover, targeted interventions can reduce blood alcohol concentration levels. Most importantly, multi-component RBS training programs that integrate server training, enhanced enforcement, as well as community coalition interventions can reduce excessive consumption compared to RBS server training alone.

A responsible beverage server training program for managers that includes in-person as well as online components can increase managers' communication with servers about cutting off intoxicated customers. Also, it can increase their practice of written RBS policies. However, it cannot reduce the probability of selling alcohol to intoxicated customers. Online responsible beverage server training programs with interactive activities as well as user involvement can have immense effect in reducing over-service cases compared to in-person training programs. In Sweden, the multicomponent alcohol prevention initiatives consisting of brief online responsible beverage server training are effective in reducing over-service rates in sporting events. However, they are not effective in reducing excessive consumption of alcohol among spectators. Responsible beverage server training programs can also reduce alcohol related violence and alcohol sales to underage patrons. States with RBS policies have lower DUI cases compared to those without such policies. The strength of RBS laws is not associated with alcohol impaired driving and self-reported binge drinking. Effective evaluation, feedback, and clear role definition can help in facilitating effective implementation of responsible beverage server training.

Stable and high quality implementation that consist of active discussions among major stakeholders can lead to the successful implementation of responsible beverage server training programs (County Health Rankings, 2022b).

Fell et al. (2017), in a study about the effects of RBS intervention on bars, bar patrons, as well as impaired driving, found that positive changes were associated with RBS interventions. However, other respondents showed negative associations. Overall, the research findings showed mixed results. However, the RBS policies showed some positive outcome. With this in mind, it seems as if bar owners are aware of the RBS program fewer patrons are likely to become intoxicated. Effective training of servers and enforcement of RBS policies can also reduce the level of impaired driving. In another study, Nederhoff et al. (2016) found that that bar managers believed they could refuse service to intoxicated customers. However, they less likely shared necessary information with their subordinates on how to refuse such sales. Ecklund et al. (2017) found that many managers and servers had experience with RBS training programs. They also found that many establishments had written alcohol service policies. Moreover, managers and servers perceived greater possibility of facing legal consequences for serving underage youth. Most importantly, managers and servers expressed reservations about over service of alcoholic beverages but never reported greater reservations about the potential legal issues for over service of alcohol. Anderson, Chisholm, and Fuhr (2009) indicated that past studies have shown the effectiveness of various types of alcohol policy, including liquor taxes, minimum drinking age laws as well as legal limits on blood alcohol concentration in reducing alcohol-related harms

The research findings support Rossow and Baklien (2010) position that the efficacy of RBS policies can only be realized through correct implementation. The researchers found that RBS programs were ineffective in reducing drunk driving because they failed to realize their goal of reducing on-

premises sales to intoxicated and/or underage buyers. The process assessment showed that the contents of Norwegian RBS programs were restricted and represented only a light version. Furthermore, Rossow and Baklien (2010) found that program implementation differed significantly among different bar patrons. For instance, some critical aspects of the programs were never implemented. In other instances, participation was a prerequisite for the extension of opening hours.

However, a Cochrane review of studies found no sound evidence that RBS interventions prevented drunken driving injuries and deaths (Ker & Chinnock, 2008). In addition, the Community Preventive Services Task Force (2010) found insufficient proof to determine the effectiveness of RBS programs in reducing alcohol consumption as well as alcohol-related injuries at a population level. The task force reviewed articles that mainly examined specific, intensive RBS training programs with short follow-up times. Hence, they were not representative of the various types of RBS programs, regulations, and laws in the United States. Most of the studies reports positive results of RBS training programs in reducing DUI. However, the task force could not gauge the effects of RBS training programs on larger communities because it focused on the effects of RBS programs within individual establishments. Linde et al. (2017) did not find any correlation between stronger state-level RBS laws and lower cases of self-reported binge drinking. Also, they did not find any correlation between stronger level RBS laws and alcohol-impaired driving. Moreover, enforcement of RBS laws at the state level did not moderate relationship between the strength of RBS law and alcohol-impaired driving. The lack of a correlation in their analysis might indicate that RBS laws and programs are less effective than other alcohol policies and laws in minimizing alcohol impaired driving.

Research Objective 3

Exploring measures to improve RBS to generate positive outcomes in reducing drunk driving in Maryland was the final objective of this study, as shown in the third research question. It was also found that bartenders did not serve underage and intoxicated customers because it was a violation of alcoholic laws in the State of Maryland. A violation of RBS laws in Maryland and serving underage customers could lead to loss of license, jail term, and fines. However, RBS laws affected customer service delivery because of the laws dictated organizational policies, prevented servers and patrons from serving underage and intoxicated individuals, and ensured that they adhered to legal requirements.

While RBS laws affected how bartenders serve customers, they considered cutting services to intoxicated customers as a primary job requirement. Even organizational management supported servers and patrons in such cases. To enhance the effectiveness of RBS policies, it was found that real IDs/ Checking of IDs and identification of fake IDs were the most appropriate measures to improve RBS to generate positive outcomes in reducing drunk driving in Maryland. Other proposals include the use of black lights and bouncers, implementation of age identification policies.

These findings support relevant works of literature arguing that RBS policies are effective in reducing drunk driving. For instance, Johnson and Berglund (2003) indicated that server training programs help in reducing the level of intoxication of customers. In this study, the researchers found that the BACs of customers of intervention establishments were reduced compared to customers served at control bars. Toomey et al. (2001) found similar outcomes in their study. In their study, the managers of five establishments in Minnesota received information on policies to prevent illegal selling of alcohol, legal issues, communication, and information on risk level. The outcomes of underage, as well as pseudo intoxicated buying attempts conducted prior to and after interventions, indicated that underage

sales declined by 11.5% while pseudo-intoxicated sales decreased by 46% when compared to control establishments. While the results were statistically insignificant because of the small sample size, the findings indicated that RBS policies could effectively reduce drunk driving.

Wallin, Gripenberg, and Andreasson (2002) also found that community alcohol prevention programs can significantly reduce the frequency at which servers serve pseudo-intoxicated customers. This prevention program, including RBS training, happened in Stockholm, Sweden. The researchers found that 47% of legal establishments denied alcoholic beverages to pseudo intoxicated customers, representing a significant increase from the 1996 baseline of 5%. These results indicated that RBS training alongside periodic enforcement and other policy initiatives could play an essential role in reducing drunken driving. In another research, Holder et al. (2000) found that RBS training programs can reduce drunk driving as well as drunken driving-related injuries and fatalities.

An RBS training program by the NHTSA was designed to decrease impaired driving by reducing the supply of alcoholic drinks. The project focused on high-risk alcohol establishments and the administration of RBS training as a solution. It involved creating a Hospitality Oversight Committee that coordinated and guided interventions in response to the over-serving of customers. The committee also oversaw project implementation. At the core of the program was a POLD survey administered to persons attending drunk driving programs in Ventura, California. These participants had been arrested previously for drinking under the influence. The intervention consisted of RBS training. Researchers approached targeted establishments and provided free customized training for each bar based on their risk assessment results. In addition, the researchers monitored and assessed improvements made with the targeted outlets. They found a significant reduction in DUI cases and changes in business practices (Institute for Public Strategies, 2003).

According to MacKay (2018), RBS encourages a responsible and caring approach to the service of alcohol to decrease alcohol service-related issues. RBS policy is a strategy that many governments have utilized to prevent the hazardous use of alcohol by individuals in restaurants and bars. Scherer et al. (2015) found that RBS training laws led to a 3.6 % total decrease in drunken driving.

Nonetheless, Rossow and Baklien (2010) assert that the efficacy of RBS policies can only be realized through a correct implementation. They found no effectiveness because RBS programs did not decrease on-premises sales to intoxicated and underage buyers. Linde et al. (2016) also found no correlation between RBS law and self-reported binge drinking or alcohol-impaired driving. Trollidal et al. (2013) assert training servers and patrons alone have had little impact on over service of alcohol or alcohol-related problems. Toomey et al. (2008) posit that training only servers and patrons ignores the environment in which they serve, including managers' roles. Management typically sets the policy on how patrons and servers ought to serve alcohol to customers. Thus, involving managers in the promotion of RBS practices is a promising path. Nonetheless, the impacts of existing manager training programs can also be limited if only used by themselves.

Assessing the perceptions, practices, environmental factors, and perceptions of many types of servers and patrons concerning responsible alcohol service could help inform future RBS training programs. The 1999 research findings by Gehan et al. reported the creation of the Alcohol Risk Management and Enhanced Alcohol Risk Management programs. The research team carried out focus groups with bartenders, owners, managers, security staff, and alcohol servers from restaurants and bars (Toomey et al., 2017). These intensive management programs promote the establishment of RBS policies for bars and restaurants. The creation of these training programs and the questions used during

the Gehan et al.'s focus group study were based on Bandura's social cognitive theory (Ecklund et al., 2017).

Interview discussions focused on the environmental, personal, as well as behavioral factors influencing responsible behavioral service. Some of the personal factors explored include servers' knowledge about alcohol control laws in Maryland, perceptions of potential legal liability, and experience with server training programs. The other personal factors explored included attitudes toward cutting off service provision to intoxicated customers and expectations that managers should enforce policies. Interviews about behavioral factors centered on the ability of servers and patrons to implement establishments policies and servers' experience of service to customers. The interview also focused on environmental factors influencing the sale of alcohol by servers, such as creating and implementing establishment alcohol service policies and the legal enforcement environment.

Ecklund et al. (2017) found that servers and patrons were hesitant to cut off intoxicated customers because customers became aggressive and feared losing tips. Servers reported different levels of support from organizational management. Some indicated that the management would back up their decision not to serve intoxicated customers. Others reported that they would lose their jobs for refusing to serve customers. Hughes et al. (2012) found that some managers did not know how to deal with challenges posed by intoxicated customers. Chinman et al. (2011) found that servers and patrons supported the idea of developing written policies to foster responsible alcohol service within bars and restaurants.

While servers should apply sound judgment to decisions regarding alcohol consumption, they rarely do so. And in as much as server training programs have led to a successful modification of alcohol serving practices, they have proven ineffective with serving underage drinkers and intoxicated customers. According to Fell et al. (2017), a study by McKnight in 1993 found that researchers

simulating signs of intoxication were only refused alcoholic drinks in 5% of 1000 visits to more than 230 drinking establishments. Concerning serving alcoholic beverages to underage customers, studies have found that youths can easily acquire alcohol from establishments most of the time.

Gehan (1999), following a discussion with bar owners and managers, found that none had acquired formal management training, and few had written establishment RBS policies determining expectations for a responsible serving of beverages. In addition, managers and bar owners indicated that they were confused about applicable state laws relating to the service of alcohol. Most importantly, managers had left decisions concerning cutting off intoxicated clients to servers and did not back them up. While servers reported few legal consequences for not cutting off intoxicated customers, most were afraid of being sued for failing to cut off customers under state laws. Also, most managers did not want to be held accountable for their subordinates' alcohol service. The state of hospitality may have changed since then. Hence, it is important to update RBS training programs, including the ARM and the eRAM programs. This study's findings could inform the need to change or update the current responsible behavior service training programs and other approaches to cutting off service delivery to intoxicated and underage customers.

Enforcement of State Alcohol Service Laws

There is sufficient evidence that enforcement of policies that prohibit selling of alcohol to underage and intoxicated patrons such as conducting of compliance checks and reduction of sales to minors can prove effective in reducing cases of DUI. Such enforcement also help in reducing underage alcohol consumption as well as alcohol related accidents among persons under age 21. Underage compliance checks have proven effective in reducing alcohol sales to underage persons of different racial and ethnic backgrounds in liquor stores and bars. In addition, compliance checks can also reduce

sale of alcohol to underage individuals at establishments located in communities that do not perform such enforcements. Implementing rigorous enforcement measures including shoulder tap operations, enforcement of laws prohibiting sale of alcohol to minors, and compliance checks are associated with reduction in underage drinking. There is a direct relationship between underage compliance check and reduction in alcohol related accidents for drivers below 21 years old but not with accidents involving those aged 21 years and above (County Health Ranking, 2020a).

Generally, alcohol enforcement agents in urban areas tend to conduct underage compliance checks more than those located in suburban and rural areas. In addition, agencies in urban areas enforce penalties around serving alcohol to underage patrons more than agencies located in rural areas. Enforcement agents also tend to enforce laws targeting adults serving alcohol to underage patrons, including underage compliance checks, in case there is a specific division for alcohol enforcement. Studies show that compliance checks are more effective when conducted more frequently, well-publicized, solicit community support, involve penalties to both servers and establishments, and well-designed (County Health Ranking, 2020a).

Non-compliance with prohibitions against alcohol service to intoxicated customers can be attributed to ineffective enforcement. Generally, unenforced laws are laws unobserved. Fell et al. (2017) indicate that an experimental enforcement effort of alcohol services in a county in Michigan saw an increase in denial of services to pseudo-patrons from 18% to more than 50% in licensed bars and restaurants. The percentage of drivers coming from establishments also decreased from 32% to nearly 23% in the relative number of DUI arrestees coming from establishments.

Thus, enforcement requires public awareness that it is happening if it aims to deter a targeted behavior and attitude. In the Michigan study, enforcement agencies invited licensed establishments to

scheduled meetings to learn about the nature of enforcement initiatives and penalties for violating state alcohol service laws. Each visit to licensed establishments by law enforcement officers was followed by a letter indicating what had happened with the following steps intended to leave impressions that the law enforcement agencies could be present at any moment (Fell et al., 2017). While enforcements could help in deterring the service of alcoholic drinks to intoxicated and underage customers, they entail significant costs.

According to Fell et al. (2017), the intervention in Michigan involved more than 1 hour of enforcement for every observed incident of service delivery to intoxicated customers. A cost-benefit analysis of the reduction in DUI arrestees emanating from licensed bars and restaurants indicated that the benefits of the enforcements outweighed their costs. Nonetheless, it is important to note that the savings in dollars due to fewer accidents do not fund the enforcement. Where enforcements fall within community police departments, it is their responsibility to compete for time as well as funds with control over other types of public protection.

Hindrances to Effective Server Training

Attempts to foster RBS must address the hindrances that impair the effectiveness of such programs to decrease impaired driving, the serving of underage customers, and the serving of intoxicated clients who are obviously impaired. The reinforcement for servers who work in bars and restaurants in risky situations is numerous. Still, it seems that the cases mentioned above are the revenue incentives of selling as much alcohol as possible and the difficulties arising from refusing to provide service to customers.

An obvious hindrance to measures aimed at fostering RBS to customers is the economic hindrance because selling alcohol is what establishments do. Thus, discouraging consumption of alcohol

implies less money for an establishment and servers via gratuities. Moreover, the tendency for some customers to become aggressive and violent when a server cuts them off is a potential hindrance to intervention, particularly late at night among tired servers. Wheeler et al. (2000) identified many barriers to effective server interventions including intimidation, fear of losing tips, and lack of perceived management. Other factors included job demands and server-patron relationships. The researchers noted that alcohol servers lacked adequate knowledge about New Mexico State laws. However, they understood the impacts of alcohol, knew about server intervention techniques, and knew about impairment versus intoxication, which changed the way they serve their patrons.

Limitations of the Study

The limitations of the study include heavy reliance on RBS policies. There are significant concerns about the conflicting nature of the results from studies on the effectiveness of RBS policies. For instance, Scherer et al. (2015) results indicate that dram-shop liability legislation and RBS policies are associated with a significant reduction of per capita beer consumption and fatal crash ratio. However, the data used in the study were annual state data that were meant to explore the effectiveness of minimum legal drinking age legislation and policies, RBS training, and state-controlled alcohol sales on underage alcohol consumption and fatal alcohol-induced fatalities. Furthermore, the data used in the current study was based on a comparison between states with weak legislation compared to those with strong alcohol-management legislation. The aim of the study was to analyze the relationship between alcohol consumption and fatal crash ratios (Scherer et al., 2015). In this regard, biases are likely to occur since the crash ratios compared states with unequal alcohol legislation and policies, reducing the results' validity.

Although Scherer et al.'s (2015) study found that RBS training legislation was responsible for a 3.6% decrease in alcohol fatalities, the results conflict with other studies. For instance, Rossow and Baklien (2010) found that the efficiency of RBS alcohol policies can only be achieved through effective implementation approaches. The researchers found that the RBS policies and training programs are ineffective in regard to meeting the objectives of reducing on-premises alcohol sales to intoxicated and underage customers. Although there are conflicting results regarding the effectiveness of the RBS legislation and policies on which the current study is based, RBS policies and programs are known to reduce alcohol-related fatalities (Scherer et al., 2015). Therefore, the RBS policies' effectiveness can be increased by applying appropriate implementation strategies according to the target populations and regions.

Further afield, the current study does not explore the effectiveness of other measures including ignition interlocks laws, sobriety checkpoint policies, mass media campaigns, alcohol screening interventions, and suspension laws in reducing DUIs. According to the CDC (2019), ignition interlocks have proven effective at preventing repeat offenses by interlocking cars if a driver has attained a BAC level of more than 0.02%. Sobriety checkpoints allow law enforcement officers to briefly stop drivers at a specific point to see if they are impaired.

Social Implications

The implications of this study include its potential to reduce alcohol-related fatalities at the local level and throughout the state at large. If the recommendations are successfully applied, there will be a high likelihood of social change, including a reduction in alcohol sales to underage buyers and a reduction in the number of cases in which drunk consumers are allowed to buy more alcohol. Additionally, the results indicate if a program or intervention is properly implemented it potentially can

reduce risky alcohol consumption. As a result, the total number of alcohol-related fatalities, accidents, and incidents will reduce significantly. The concepts and strategies suggested in this study can be applied by community social welfare groups, bar owner associations, the government, and healthcare institutions to effectively manage irresponsible sales and alcohol use in society.

Conclusion

For Researchers

Researchers must move beyond their academic roles to apply their research findings to real-life issues. Where the ultimate objective of a research study is to improve the human condition, researchers have no option but to redefine their roles. In essence, they must go past current academic norms, which end with presenting research findings. Rather than being the endpoint, research starting must be seen as the first half of the process, and with an action phase should follow. Researchers must, therefore, play active roles to translate research findings into valuable initiatives. Failure to do so, the research results will have limited impacts.

Social science researchers must also transfer networks to other parties implanting the findings of a study. In performing a social science study, researchers normally develop formal and informal networks of entities with different resources to help with the research. Researchers must facilitate their involvement in the translation phase of a study in an already established network. This implies that they must provide them with their general contacts and contextual information like histories, relationships, and backgrounds that the contacts have with the researcher and each other. From the start of a research project to the action phase of developing research materials, a researcher typically structures opportunities for different people to own the research project. All phases of a research project provided them with opportunities to pilot ideas, materials, plus surveys. Hence, it is important to involve different

stakeholders throughout a research process to increase the effectiveness of research findings when translating them into action.

Research findings must also be written in simple language for easy understanding by the target audience. Generally, study reports end with a set of recommendations for readers irrespective of their background as well as interests. Nonetheless, social science studies normally impact different types of audiences. Thus, researchers must break down general discussions into smaller discussions suitable for different audiences when translating research findings.

For Servers

Solving the issue of serving underage and intoxicated customers requires consideration of many factors. Most bars and restaurants operate in complex environments and numerous factors interact, leading to the acquisition of alcohol by intoxicated and underage customers. Some of the factors include a server's attitude and actions, the training and expectations of management, the assumption that another person checked a minor's identification, and the inconsistencies of state laws. Other factors include the local law enforcement agencies and legal aged people supplying alcohol to underage persons. There is no denying that servers support the minimum drinking age. However, other factors include fear of losing a job and fear of customer aggression.

Servers play an essential role in communicating with minors regarding underage drinking. This study indicates that alcohol servers approach underage and intoxicated customers when refusing to serve them and cut them off, respectively. Given that servers act as the firsthand contact with intoxicated and underage customers, they play an important role in refusing service to minors and reducing service to intoxicated customers. Most alcohol servers discourage minors from buying alcoholic drinks. This study indicated that servers frequently decline to serve underage and intoxicated clients.

For Adult Educators

There is a need for proactive approaches that enhance already existing resources. When dealing with social problems, problem-solving approaches are normally the only paradigm used. In essence, people normally react to problems by targeting only those aspects of problems they consider undesirable. However, it is important to use marketing strategies affecting perceptions via proactive approaches. Alcohol servers and other stakeholders are putting more effort to reduce alcohol-related issues than can be imagined by those dwelling on the problems. To build environments that can support change, there is a need for proactive techniques that foster desirable behaviors and already existing outcomes. Servers and bar owners need to be found doing the right things and then letting relevant stakeholders know about it.

Server training programs must recognize managers of establishments as important information gatekeepers. Servers stressed the vital roles that bar owners and managers play in setting expectations and policies for servers. Since bar owners and managers are the trainers of servers, server training programs must address their needs to enlist their role for training servers.

The dissemination of findings needs to go beyond publication to encompass field-based practical approaches. Studies such as the current one counter the sufficiency of the research model of data collection and analysis and presentation of findings in some academic journal to be read by an elite audience who understand the language. Instead, this study shows that researchers are responsible for disengaging from this outdated practice by transforming research findings into actions that can benefit societies.

For Governmental Agencies

Social problems require solutions resulting from shared responsibilities. It is important to form coalitions around solving a problem. All parties involved must have some level of responsibility to solve a given problem effectively. Failure to bring different stakeholders together can lead to supporting misperceptions held by one group against another. But groups tend to operate independently from one another, which may lead to the development of oversimplified and ineffective recommendations.

It is important to increase resources to change the social norms and beliefs associated with drunken driving. None of the respondents in this study reported involvement in designated driver campaigns, and most agreed that it is important to enhance server training programs most specially to create a national awareness program. Increased resources will increase the number of driver programs aimed at reducing drunken driving. Also, increasing resources could expand designated driver approaches and reduce problems associated with drunk driving. Some of the important resources include research, training, marketing, money, and learning materials. Alcohol prevention facilities and agencies should also be contracted to provide this training in every county in the State of Maryland. In addition, Universities, colleges and Vocational-Technical centers should also be contracted in providing trainings thereby creating a national awareness to curb this National issue of DUI.

Recommendations

For Researchers

Researchers in university settings should re-evaluate their standards for determining the quality of research studies. The dissemination of research findings should be included in publications and the application of field-based practical approaches. Given that many social science researchers are based in higher learning institutions, such institutions should restructure their policies to reflect the importance of

field-based practical approaches instead of just publications. More importantly, a publication should be considered as the first phase of a research study. The second and most meaningful stage should be how researchers translate research results into social action.

For Servers

There should be an advisory board of alcohol servers that reviews training materials and methods. Developing an advisory board for training programs should continue to involve alcohol servers in the expected training outcomes. The board may also include bar owners and managers. Servers should also be cautioned about the potential consequences of laxity and over-serving intoxicated clients and underage customers. Servers should be reminded that they should not let their relationships with customers cloud their professionalism. When clients have had enough drink, servers should cut them off irrespective of their personal feelings and remind them of violating state alcohol service laws. Servers may require new skills through training to intervene in such situations. Their training should be more practical than theoretical with the potential to apply the acquired training in real-life situations. Servers should also be aware of the significance of modeling alcohol health on their job and in their lives. When outside the work environment, they should practice good behaviors because they represent the industry.

For Adult Educators

Adult educators should involve servers during the determination of topics and methods of training sessions. Not mandating server training programs places significant pressure on trainers to market their programs to intended audiences. But involving servers, bar owners, and managers in the development of training sessions and programs could help in ensuring that the programs cover appropriate issues. It would also offer credibility from stakeholders in the field.

Adult educators should also relate server training programs with the expressed needs provided by servers. They must identify the benefits that servers can gain from attending such training programs and relate them to their needs.

Government Agencies

Government agencies should not mandate training for servers. On the contrary, willingly allowing them to participate in such training through sensitization and awareness programs will allow them to perform their job well. Rather than using resources to develop compliance and adherence systems, governmental agencies should consider supporting the development of effective server training programs and materials. Most importantly, they should consider servers as partners and resources to solve the problem of drunk driving rather than considering them as targets for intervention.

Individualized RBS training sessions should be offered to establishments based on their uniqueness. The training should include slides on signs of intoxication and advice for servers and managers on dealing with apparently intoxicated patrons.

Age identification scanners should be offered as an incentive to establishments to identify fake Identification Cards. Bar patron breath tests for collecting BAC and impaired-driving protocols should be encouraged in bars with suspected or apparently intoxicated patrons. Safeguard protocols should be used to identify intoxicated patrons and intervene if they are planning to drive. Owners and managers should always back up their servers in terms of proper implementation of these trainings and other program interventions that can potentially reduce risky alcohol consumption. Alternative transportation should be provided to intoxicated patrons. State, counties and cities should provide/subsidize free Uber, taxi services for intoxicated customers and this also need to be highly encouraged and publicized by alcohol establishments.

Government agencies should also market RBS training programs for servers to believe that they are getting value for their money. To enhance enforcement of RBS, the government agencies can conduct pseudo patrons' assessments to test serving practices and intervention skills of alcohol servers in some establishments. The assessment would show if intoxicated patrons were served and whether any driving interventions were attempted or provided to apparently intoxicated patrons. With all these interventions, I believe drunk driving issues in Maryland will be reduced to a minimal level, thereby making the road safe for every American.

The state of Maryland legislature, Congress, US Senate should provide comprehensive funding to the department of alcoholic beverage control to promote RBS programs and trainings. The move will ensure that many servers and bar owners undergo RBS training and certify to make it a national standardized requirements for all Bars across the United States. In California, the government has allocated funds to the California Department of Alcohol Beverage Control to launch a new RBS training portal. This initiative targets at least one million managers and servers who own and serve alcoholic beverages at areas with on-sale privileges such as restaurants, wineries, breweries, bars, and clubs (CDABC, 2021). With a release of a similar program, the state of Maryland will register many servers and alcohol licensees with the department of alcoholic beverage control and then connect them with approved training providers in one place.

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