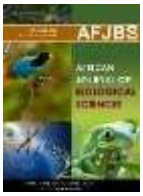
Https://Doi.Org/10.48047/Afjbs.6.Si4.2024.4914-4934

African Journal of Biological Sciences



A COMPREHENSIVE EXAMINATION OF THE ALCOHOL STRATEGY IN THE UNITED KINGDOM: A SYSTEMATIC REVIEW

Raj Vishnoi*, Gargi Yadav, Nitya Awasthi, Geetanjali Negi

[1]P.G. Nursing Tutor (Child Health Nursing), Dev Bhoomi Uttrakhand University, Dehradun,
Email: rajchaudhary091997@gmil.com, Orchid ID: 0009-0000-9367-6701
[2]P.G. Nursing Tutor (Mental Health Nursing), Naraina Nursing College, Kanpur
[3]P.G. Nursing Tutor (Mental Health Nursing), Teerthanker Mahaveer College of Nursing, Moradabad
[4]Assistant Professor, Mental Health Nursing

***Corresponding Author:** Raj Vishnoi
*P.G. Nursing Tutor (Child Health Nursing), Dev Bhoomi Uttrakhand University, Dehradun,
Email: rajchaudhary091997@gmil.com, Orchid ID: 0009-0000-9367-6701

Article History
Volume 6, Issue 4s, June 2024
Received: 15 June 2024
Accepted: 25 July 2024
Published: 15 Aug 2024
doi:10.48047/AFJBS.6.Si4.2024.4914-4934

ABSTRACT

Through the alcohol strategies the UK government initiates ways to reduce the level of deaths, illness, diseases, injury connected with the consumption of alcohol. The study has the aim to critically **"evaluate the effectiveness of alcohol strategy in the United Kingdom: A systematic review"**. It becomes significant to note that in spite of the government's several measures to reduce the impact, the perspectives of the population about the duty of the government to manage the alcohol trends remain different. The over consumption of alcohol has the ability to hamper the human mind as well as the body and a larger population in the UK consume harmful levels of alcohol.

The literature review interprets different authors' views to shed light on the impact of alcohol consumption in the UK. It has been identified that binge drinking results in both physical and mental problems. Furthermore, it has been observed that "cancer and liver problems" are commonly experienced by consumers of alcohol in the UK. Therefore, it is observed that the alcohol strategy has been undertaken by the government to mitigate "chronic alcoholism" among the UK population. However, the availability of alcohol encouraged both men and women in this nation to consume alcohol. Thus, it has been identified from the literature that the alcohol strategy and measure undertaken by the UK government has been challenged during the pandemic hours.

The study has undertaken secondary data collection method and examined through the systematic analysis technique. The data analysis was conducted by considering both primary and secondary data. The data analysis suggested that the key factors influencing alcohol consumption include peer pressure, social trend, binge drinking cultures, and many others. Specific legislative measures were taken by the government, is taxation on the price of alcohol and the screening process to reduce drinking and driving behaviour. Although, the country has witnessed a declining rate of alcohol consumption till 2016 but, in the year 2018, the country provided relaxation on the taxation that again influenced alcohol consumption and increased the affordability of the alcohol product.

The discussion chapter unfolds the implications of the findings. All the objectives are met by the several steps of the study. It is noted that the use of primary data may provide more efficacy in the study. Moreover, based on the key findings of the study recommendation has been drawn.

Introduction

The alcohol strategy in the UK aims to break down the “binge drinking culture”, prevent the violence stemming from the alcohol consumptionand others (Gov.uk, 2012). The effectiveness of the alcohol strategy in the UK alsolies in their commitment towards the reducing of the price for the alcohol.As per the World Health Organisation, the harmful consumption of alcohol paves the way for almost 3 million deaths every year and depicts approximately 5.3% of the deaths (Who, 2023). Besides the health consequences, the harmful intake of alcohol has the potential to initiate social as well as economic losses of lives. There also exists a relation between the harmful intake of alcohol and the range of behavioural as well as mental disorders and injuries. However, alcohol has become one of the most psychoactive substances with "dependence-producing properties" that have been utilised in several cultures for centuries.

The harmful utilisation of alcohol tends to render harm to individuals and most significantly, it is connected with the risks of developing several health-related issues such as behavioural disorders, alcohol dependence, non-communicable diseases including the liver cirrhosis, cancer, cardiovascular diseases. On the other hand, there also prevails a relation between the outcomes of several infectious diseases involving tuberculosis, HIV and the harmful consumption of alcohol. The levels at which people consume alcohol might affect them, and in the case of the UK, almost 17% of the population "binge drink alcohol" (Gov.uk, 2023).

In the UK, "alcohol-specific death rates" has maximised in the 25 years, reaching approximately 16.1 males per 100000 and almost 7.8 women per 100000 in 2019 (Stewart, 2023). On the other hand, in 2019, nearly 40% of males and 20% of females aged between 55 to64 have been consuming alcohol at a level that can lead to the maximised health risks. However, the government of the UK generates guidelines and recommendations for the consumption of alcohol in order to change the drinking behaviour of the people. With the assistance of the "Change4Life campaign," the UK government aims to make individuals informed regarding the negative consequences of it (Gov.uk, 2023).

Background of the study

Percentage of the people who consume at least once a week in the UK

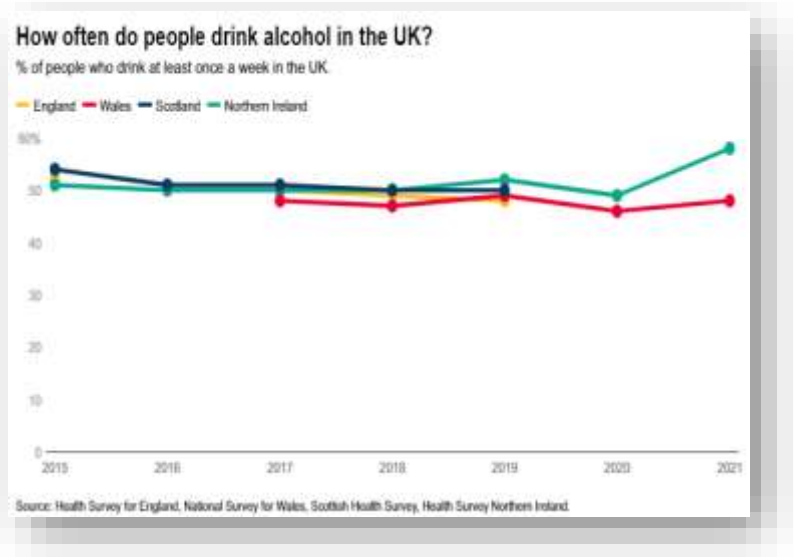


Figure 1.1: Frequency at which people drink alcohol in UK
(Source: Drinkaware.co.uk, 2020)

It is observed that in the year 2020, the UK encountered almost 8974 alcohol-specific deaths which exhibit a maximisation of 18.6% from the year 2019 (refer to figure 1.1) (Drinkaware.co.uk, 2020). The misuse of alcohol is considered one of the significant risk factors for death in the UK and has become the fifth largest factor across the ages. It can be noted from the above image that in the year 2019 there existed almost 48% of the individuals in the England who consumed alcohol at least once every week while Wales also had 48% people in the year 2021 (refer to figure 1.1) (Drinkaware.co.uk, 2020). On the contrary, it was found that in the year 2019, the prices of alcohol in the UK reduced by approximately 5% and became 13% more affordable when compared to 2008. However, alcohol contains powerful chemicals that tend to render a broader range of diverse impacts on almost all the parts of the body, such as the brain, heart, bones and others (Alcoholchange.org.uk, 2023).

The consumption of alcohol is connected with short and long-term impacts and begins to affect the decision-making and judgemental power of the individuals (Simpson *et al.* 2019). However, the excess amount of alcohol has the ability to make a person undergo diarrhoea, dehydration, headache, and indigestion. Moreover, some other risks linked with alcohol intake include accidents, antisocial behaviour, loss of personal possessions and others. On the contrary, the long-term health risks involve high blood pressure, stroke, liver cancer, mouth and bowel cancer, depression, dementia and others (Nhs.uk, 2023). With the assistance of the "UK Government's Alcohol Strategy," the country is able to control consumption to some extent.

Customer spending on alcohol beverages (for consumption at home) in the United Kingdom from 2005 to 2021

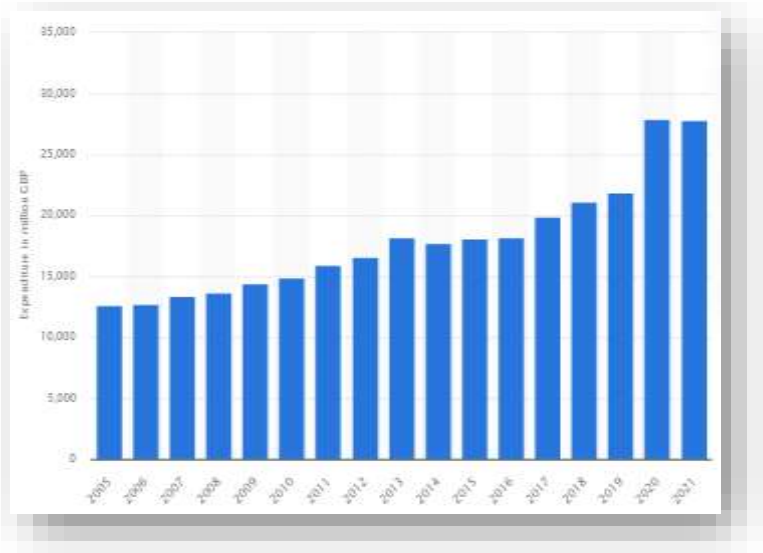


Figure 1.2: Spending on alcohol in UK
(Source: Statista.com, 2022)

As per the Statista report, it is noted that customer spending on the purchase of alcohol within the UK has decreased in the year 2021 and has reached to almost 27.8 billion British pounds (refer to figure 1.2) (Statista.com, 2022). Therefore it can be stated that the government's intervention and

measures or strategies have been providing benefits in preventing maximum intake of alcohol (refer to figure 1.2). The UK government, with its alcohol strategy, has their aim to redesign the approach of the audiences towards alcohol (Assets.publishing.service.gov.uk, 2023). With their system, they have been cultivating ways to reduce the consumption of alcohol among the population.

The different measures undertaken by the government have been beneficial in order to prevent and change the mindset of the people towards the intake of alcohol (Jacob *et al.* 2021). With their strategy, the government has been executing the objective of lowering the availability of cheap alcohol. The government of the UK, so as to control the availability of discounted alcohol, maximised the alcohol duty by approximately 2%, along with several other steps (Assets.publishing.service.gov.uk, 2023). Such measures towards the prevention of the overconsumption of alcohol positively contribute to the lower numbers of alcohol purchasers in the UK.

Alcohol specific deaths in the United Kingdom from 1994 to 2020, by gender

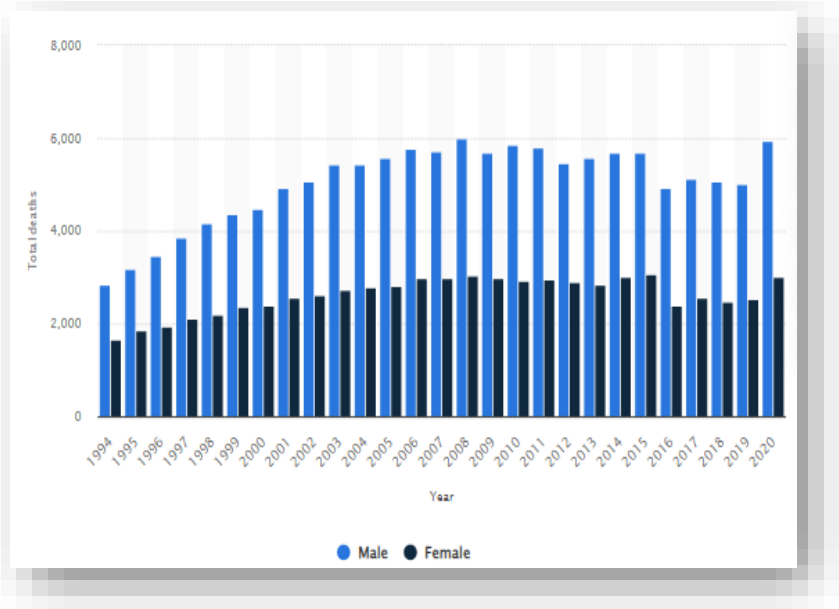


Figure 1.3: Deaths due to alcohol intake in UK

(Source: Stewart, 2022)

On the other hand, it is also observed that the "Alcohol Drinks Market" is expected to witness a growth of almost 5.0% by 2024 (Statista.com, 2023). However, the overconsumption of alcohol leads to the initiation of varied diseases. As per the Statistical report, it is noted that the year 2020 caused almost 5957 males to lose their lives, whereas approximately 3017 females lost their lives due to alcohol-related issues (refer to figure 1.3) (Stewart, 2022). Hence it can be witnessed that more number of males lost their lives when compared to the females (refer to figure 1.3). Such a rise in the number of deaths due to alcohol urges the significance of undertaking and imposing strict rules.

Aim and objectives

The study aims to critically evaluate the effectiveness of the alcohol strategy in the United Kingdom: A systematic review.

The objectives are as follows:

- To examine the factors that influence the consumption habit of the population in the UK

- To investigate the measures and policies that are generated by the UK government to prevent the alcohol consumption
- To determine the issues experienced by the government in controlling the alcohol consumption in the country in the last 20 years
- To analyse the productiveness of the government in minimising alcohol consumption in the country in the last 20 years

1.4 Research question

Has the United Kingdom's Alcohol Strategy effectively reduced alcohol consumption over the past 20 years?

Problem statement

Most significantly, the government of the UK has initiated several ways so as to control the intake practices of alcohol among the population. Yet the country or the public opinion and views regarding the governmental responsibilities for alcohol control trends to remain divided (Li et al., 2017). The population is observed to have been more supportive of the different, less "intrusive alcohol policies", which have the objective of lessening the alcohol-connected social as well as health issues when compared to the policies limiting their access and attaining of alcohol. The support for a policy should also involve the "perceived effectiveness of interventions" as it becomes a significant factor that might inform the support. However, they are referred to as not align with the ways the population or the public like and support the policy.

Significance of the study

The consumption of alcohol has the potential to render several adverse effects on the human body and mind (Oldham *et al.* 2021). It is considered to have been leading to toxic impacts both on the digestive as well as cardiovascular systems (Simpson *et al.* 2019). On the other hand, the consumption of alcohol contributes to approximately 3 million deaths globally, and it also paves the way for people to encounter disabilities as well as poor health (Who.int,2023). Consumption of more than 14 units a week risks the human body and mind. As per the news report, “millions in the UK” drink harmful levels of alcohol which depicts a grim picture.

The government of the UK has generated multiple strategies through which they aim to lower the intake of alcohol. On the contrary, it is also found that the government of the UK has been failing in order to undertake productive actions so as to address the “worrying rates” of the consumption of alcohol in the country (Gilmore and Williams, 2019). However, the sales volume of alcohol in the year 2021 has reached almost 82 litres per capita and depicting a dramatic reduction (Statista.com, 2022). Hence it can be stated that the UK government's measures have been positively contributing to preventing the intake habits.

Purpose of the study

The conducting of the study will lead to the examination of the different factors that can drive the population's habits towards overconsumption practices. The gauging of the different measures taken by the government will also enable the study to analyse their effectiveness and influence on the population. It is despite the people's growing health-related issues and the government steps that the population tends to consume more significant amounts of alcohol. A better comprehension of the reasons preventing productive outcomes will ensure enhanced health outcomes for the people. The purpose of the study is to develop the society by leveraging knowledge by the means of concepts, notions and theories (Haghpanahan *et al.* 2019).

Gaps in the evidence

The existing literature has mentioned the harmful impact of the overconsumption of alcohol among the population in the UK. It has also focused on the multiple governmental initiatives that are being undertaken by the government in the UK. However, the present literature has less emphasised on the effectiveness of the policies that are being generated by the UK government. The comprehension of the effectiveness of the procedures in a better manner could have enabled the study to provide enhanced suggestions regarding the ways the country can further reduce the number and the practice of alcohol consumption and also promote good health.

Scope of the study

The study will guarantee that the individuals or the institutions can acquire a better understanding of the ways the policies and the measures are benefiting the population of the UK. The scope of the study determines and illustrates what are the topics that are to be covered by the study (Weerasinghe *et al.* 2020). The illustration of the reasons that cultivate ill consumption practices will also pave the way for the population to neglect or avoid such habits. The presentation of varied data and information connected with the intake of alcohol will ensure that people can stay well informed regarding the prevalence and harm caused by alcohol. Focusing on the measures adopted by the government will also guarantee that the population can stay well aware of the limits for consuming alcohol in the UK.

LITERATURE REVIEW

Introduction

According to the 2019 census, it has been observed that 48% of adults (above 16+ ages) consume alcohol once a week (Drinkaware.co.uk, 2020). The high intake of alcohol leads to the several diseases such as strike, heart and liver diseases, digestive issues and others. Due to this reason, the UK government has taken many steps to prevent the consumption of alcohol. The chapter predominantly focuses on the various causes and the measures the UK government has taken to avoid alcohol consumption. This chapter also discusses the varied ways the government of UK has been preventing the higher consumption and productiveness of the measures taken along with the challenges they have faced in this process.

Impact of alcohol consumption on public health and society

As per the view of Lees *et al.* (2020), alcohol consumption proves to be detrimental towards the health of people. In this context, it is essential to note that alcohol has been consumed by people since time immemorial as a recreational activity. As opined by Roerecke *et al.* (2017), a huge intake of alcohol consumption can lead to uncontrollable weight gain or obesity among people. Furthermore, excess intake of alcohol can affect the **human mind**, apart from the **body**. According to Subramaniyan *et al.* (2021), excess alcohol consumption proves detrimental to human cognitive skills in the long run. In this context, “drink and drive” is a taboo in many countries that can cause serious accidents.

It is essential to note that the consumption of alcohol also possesses a negative impact on society. According to the view of Singh *et al.* (2022), it is observed that “chronic alcoholism” leads to **“psychiatric”, “social”, and “family” problems**. As opined by Lees *et al.* (2020), excessive alcohol consumption proves detrimental to the physical as well as mental health of individuals. In this context, it is essential to note that there are different types of alcohol-based beverages like beer,

wine, rum, and others that are immensely consumed by people all over the world. It is observed that excessive consumption of these alcoholic beverages can lead to serious health problems among people (Roerecke *et al.* 2017). The health issues include **"high blood pressure", "heart disease", "cancers"**, and others.

According to Di Santo *et al.* (2020), an enhanced rate of alcohol consumption can lead to a chronic mental disease of dementia. In this context, it is essential to note that the mind plays a crucial role in the smooth functioning of the body. However, the excessive intake of alcohol can directly affect the human brain. On the contrary, as per the view of Lees *et al.* (2020), excess alcohol consumption **can affect the immune systems of humans**. Any sort of harm caused to the immune system of an individual can make the body vulnerable to diseases. In this context, it is essential to note that people's inclination towards alcoholic beverages is immense all over the world. As opined by Roerecke *et al.* (2017), excessive consumption of alcoholic beverages can reduce mental conditions like **"reduction in memory power", "reduction in concentration", "frequent mood change"**, and others. Thus, it is evident that the impact of alcohol consumption is mostly negative.

Problem related to alcohol consumption in the UK

Cancer and liver problems are common side effects experienced by consumers. As opined by Kilian *et al.* (2021), **public health is threatened** by the excessive rate of alcohol consumption in a nation. In this aspect, it is essential to note that the **availability of exquisite alcoholic beverages** to consumers in the UK proves to be **problematic in reducing the rate of alcoholic consumption**.

Health Belief Model

As opined by Wong *et al.* (2020), the "Health Belief Model (HBM)" is referred to as a theoretical framework or model that promotes health safety and precautions. On the contrary, as opined by Daragmeh *et al.* (2021), the HBM is a "psychological health behaviour change model" that proves beneficial in explaining and predicting "health-related behaviours". Furthermore, it is observed that the particular model was developed during the 1950s in the "US Public Health Service". The propounders of this particular model were four social psychologists, namely, "Irwin", "Godfrey", "Stephen", and "Howard" (unizin.org, 2018). In this aspect, it is essential to note that the application of this model can be towards mitigating the rate of alcohol consumption.

As per the view of Wong *et al.* (2020), HBM encompasses people's beliefs regarding "health problems", "perceived benefits of action and barriers to action", and "self-efficacy". These components further explain the rate of engagement in "health-promoting behaviour" (Daragmeh *et al.* 2021). In this aspect, it is essential to note that perceived threat proves to be an intermediary stage between "perceived seriousness" and "likelihood of engaging in health-promoting behaviour". As per records, it is observed that further changes were made in this model in 1988to address emerging issues like "excessive alcohol consumption" and others (unizin.org, 2018). Therefore, the role of "self-efficacy" is prominent in undertaking crucial decisions regarding people's engagement in "health-promoting behaviour".

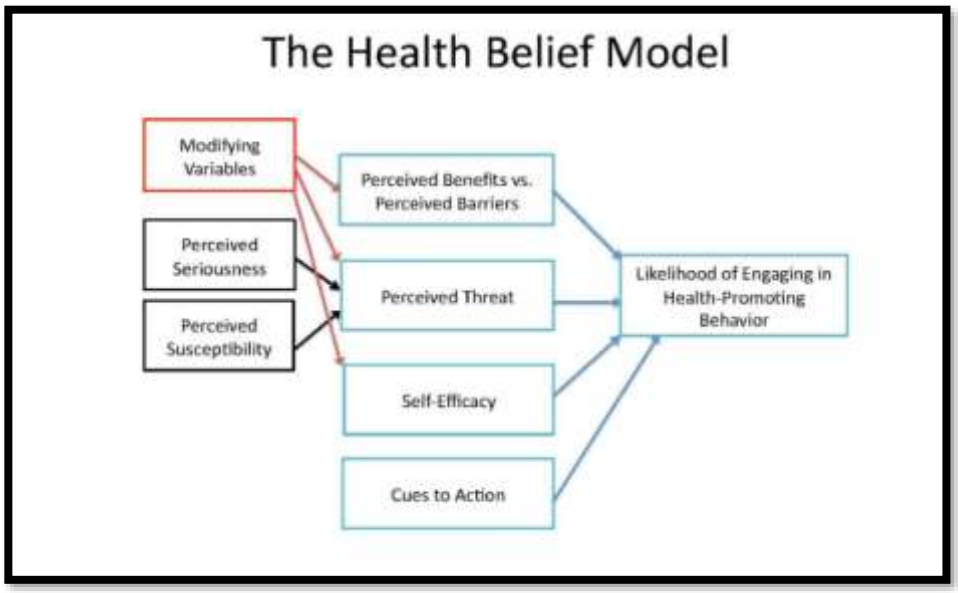


Figure 2.1: Health Belief Model
(Source: unizin.org, 2018)

The above figure 2.1 demonstrates the vital factors included in the HBM. In this aspect, the "'modifying variables" consist of "perceived values or perceived barriers", "perceived threat", and "self-efficacy" (Ruralhealthinfo.org, 2019). It is essential to note that the factors of "perceived seriousness" and "perceived susceptibility" combinedly determine "perceived" in the domain of "health-promoting behaviour". According to the view of Daragmeh *et al.* (2021), the effective utilisation of HBM promotes the "perceived benefits", which in turn, enhances the engagement of "health-promoting behaviour". Therefore, this model can also be utilised in creating awareness among the people to take precautions and maintain restrictions for creating a positive impact on public health and society.

It is essential to note that the factor of "perceived susceptibility" reflects an individual's perceived threat towards any illness or disease (unizin.org, 2018). Furthermore, "cues of action" and "self-efficacy" depict "exposure to the involved factors" and "confidence in the ability to succeed", respectively (Ruralhealthinfo.org, 2019). Precisely, it is observed that the model demands the need for assessing health requirements for a target population or patients who are in the line of risk. In this aspect, providing assistance and enhancement of self-efficacy can be effectively implemented to ensure engagement in "health-promoting behaviour".

Reasons that navigate the consumption habit of the UK population

Alcohol is now a severe issue in the UK. The reasons which are mainly responsible for increasing alcohol consumption in that population are psychological (loneliness, depression, anxiety), cultural and environmental issues, and to get pleasure. The main reason for spending money on alcohol is being sociable in the UK.As per the view of Oldham *et al.* (2021), during the pandemic, people faced stress, loneliness, health, finances responsibilities, and it led to an increase in alcohol consumption in the UK population. On the other hand, Jacob *et al.* (2021) mention in their study that more than one in six adult consumed more than younger adults due to poor mental health, depression and lower mental comfort.

In the UK, being sociable is one of the main reasons for alcohol consumption because they love to get together in clubs, bars, restaurants, and pubs to feel pleasure. Disclosure of alcohol-related

intimation is also responsible for increasing the desire for alcohol consumption (Oldham *et al.* 2021). Family history, gender, substance, age, and comorbid psychiatric (more than one psychiatric disorder) are the influencers of risk of a person for alcoholism. On the other hand, low self-esteem, personal tendencies toward impulsive decision-making, psychological disorders, and previous traumas are the causes of alcohol use disorder in the UK population. As per the view of Morris *et al.* (2020), the potency of relevance between the subjective norms and intentions for consuming alcohol is greater than the norm intention relations for other health conducts.

The tune between norms and preferences relations had been found to underline the social material. Pressure from friends is one of the causes of alcohol consumption in the UK young population rather than the adult population (Jacob *et al.* 2021). Peer pressure is a multifaceted and complicated extent that adults have experienced. In general, it is also revealed that the body water in the female body is less than in the male body. So, in that case, the female body tends to achieve higher concentrations of alcohol. Additionally, the female body is more ready to eliminate alcohol from its blood faster than the male. It is also observed that 51 % of the male consume up to 14 units of alcohol within a week, likened to 62% of females.

Figure 2.2: Reasons that lead to alcohol consumption habit in UK
(Source: Created by author)

There prevail some motives for consuming alcohol (a) to cope with stress and (b) social influences (refer to figure 2.3). The above figure exhibits the fact that other factors such as psychological problems, family history, attaining pleasure cultivate the habit of the intake of alcohol (refer to figure 2.2). Apart from this, there are a lot of motives which are accountable for drinking alcohol to enhance sociability, to escape from problems and stress, to get more power, to be drunk and for enjoyment. The motive which leads people to consume alcohol with negative reinforcement is known as "Personal-effect motives" (Lim *et al.* 2019). On the other hand, the motive which leads people to consume alcohol with positive reinforcement is called “Social effect motives". Nicholls (2020) mentions that the female population prefers to go night out with friends for enjoyment and consume

alcohol. They think it is a part of socialization and drinking alcohol is a part of spending time with their friends.

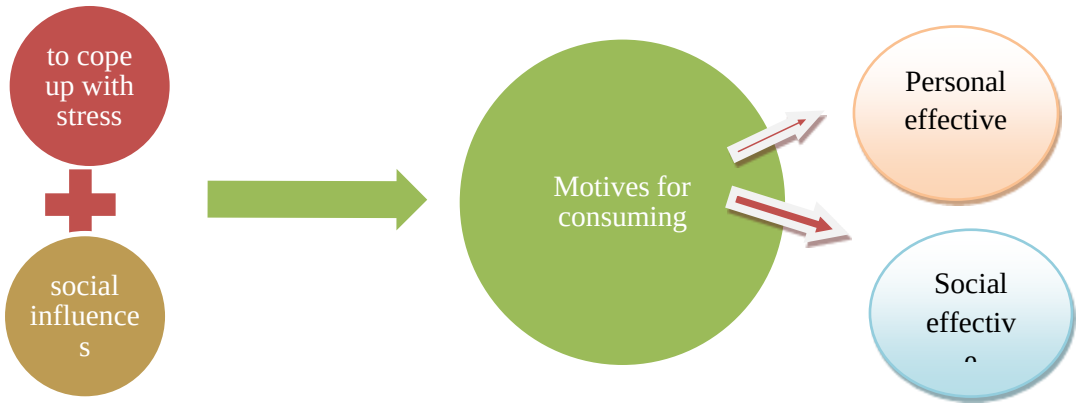


Figure 2.3: Motives for consuming alcohol
(Source: Created by author)

Steps taken by UK government to prevent the alcohol consumption

UK Chief Medical officers give advice not to consume alcohol more than 14 units per week to keep the risk low. Office from Health Improvements and Disabilities (OHID) and England's E-learning for Health care has launched an e-learning website for interaction between government and the public (Haghpanahan *et al.* 2019). Besides this, the UK government has taken several steps in advertisement to prevent young people from consuming. The UK government has also taken the strategy of pricing policies, reducing the negative outcomes of alcohol intoxication (Lim *et al.* 2019). The youth Alcohol Action Plan has been taken by the UK government to stop the young and teenage population from consuming alcohol.

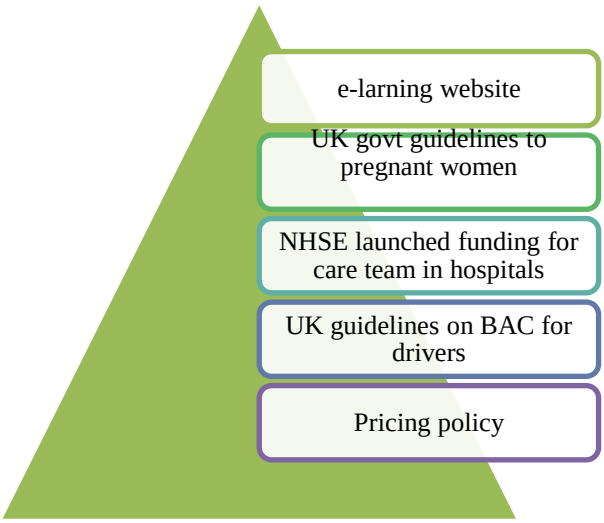


Figure 2.4: UK Government steps that have been taken
(Source: Created by author)

The figure above depicts that there are several measures being undertaken by the UK government such as establishment of the e-learning website, initiation of funding for care team, guidelines for the drivers, pricing policy (refer to figure 2.4). Lim *et al.* (2019) mentioned that the UK Government

gives guidelines to pregnant women not to drink alcohol to keep the minimum risk of a foetus because alcohol is a Teratogen which can pass through the placenta and can cause of damaging the brain and other organs of the foetus. Although there is very limited research on the influence of alcohol on male and female fertility, it is proven that intoxication can be the cause of damage to the male reproductive system. There is determinate research on the impact on infant development during alcohol consumption, but alcoholism can be a hostile effect on sleep reduction and infant feeding behaviour disruption.

Williams *et al.* (2020) stated that The UK government has faced the challenge of increasing disease related to liver damage, and it was a burden-like situation for the hospitals of the UK. Nation Health Service England (NHSE) has launched new funding for alcohol care teams in hospitals. Haghpanahan *et al.* (2019) mention that Road traffic accidents are also a major concern for the UK in recent times, and it has become a cause of mobility and mortality worldwide. The UK government has taken a step where Blood Alcohol Concentration (BAC) for drivers is now reduced from 0.08g/dL to 0.05g/dL.

In contrast to taxation and health-related issues, according to Connolly *et al.* (2019), in the case of increased taxation on alcohol, there is a balance between employment and health issues, and on the other hand, economic activity and employment are sharpened while health issues improve. World Health Organisation's (WHO) recommendation of raising alcohol prices because it is the most cost-effective and well-proven solution to the harmful effect of intoxication. It is recorded that a 10% raising the price of alcohol can lead to a 5% decrease in consumption.

Alcohol strategy in the UK

As per records, the “alcohol strategy” focuses majorly on mitigating the “binge-drinking” culture prevalent among the citizens of the UK (gov.uk, 2012). In this context, it is essential to note that the UK government has been striving hard for the last twenty years to mitigate the violence caused in the community due to an excessive rate of alcohol consumption. It is essential to note that the government of the UK has addressed the prevalent issue due to chronic alcoholism in public health and society (Service.gov.uk, 2017). The strategy further commits to deciding the minimum pricing unit of alcohol and formulating strict licensing procedures.In this context, it is essential to note that the concerned strategy undertaken by the UK government also focuses on piloting “innovative sobriety schemes” to defy “alcohol-related offending”. The UK government in 2012 published the concerned strategy (gov.uk, 2012). As per recent records, it is observed that excessive drinking leads to family and life-threatening problems among people like “neglect and abuse”, “domestic abuse”, “eating disorders”, “alcohol dependence or addiction”, “suicide”, and “foetal alcohol spectrum disorder” (Parliament.uk, 2021). In addition, the prescribed alcohol strategy by the UK government reveals the compulsion to labelling alcoholic products with nutritional information. This labelling, in turn, highlights the negative health impacts due to excessive consumption of alcohol.

Challenges faced by the government to control alcohol consumption in the country

As per records, **“24%” of the adults in England and Scotland indulged in regular consumption of alcohol**. In this context, it is essential to note that **“27%” of drinkers in “Great Britain” are involved in binge drinking** (gov.uk, 2017). This concerned percentage of heavy drinkers included both men and women; men drank over “8 units” of alcohol and women over “6 units”. It is further noted that alcohol leads to several medical conditions in the UK including “mouth cancer”, “liver cancer”, “breast cancer”, and others (Lees *et al.* 2020). During the years **2019 and 2020, hospital admissions due to overdose of alcohol consumption were marked at the rate of 12%.** As per records, the mortality rate of alcohol consumers increased to 18.6% in 2020 in comparison to 2019 (Alcoholchange.org.uk,

2021). In this aspect, one out of one million people died due to “binge drinking”. Consequently, the **UK government faced immense challenges over the last two decades in controlling alcohol consumption** through the previously discussed steps and “alcohol strategy”. As per the view of Weerasinghe *et al.* (2020), it is observed that alcohol consumption has defied pricing and labelling measures undertaken by the UK government over the years. In this context, it is essential to note that hospital admission in Scotland and Wales were relatively higher during 2019-2020. Furthermore, the lockdown during **the Covid-19 pandemic enhanced the rate of alcohol consumption among people** (Alcoholchange.org.uk, 2021). In this context, it is essential to note that the misuse of “alcohol” has caused **significant risks related to death, illness, and disability among older people in the UK**. Furthermore, the UK government that around 82% of heavy drinkers are not accessing adequate treatment (Alcoholchange.org.uk, 2021) has surveyed it. Therefore, these challenges are significant among the people who indulge in alcohol consumption residing in the UK.

2.7 Success of the UK government in reducing alcohol consumption in the countryAs per records, it is observed that in 2004, around 16% of the UK’s population were not indulged in alcohol consumption (gov.uk, 2017). However, due to the “alcohol strategy” adopted by the UK government in 2012, the government succeeded to some extent by reducing alcohol consumption among its citizens (gov.uk, 2017). In this context, it is essential to note that in 2020, the percentage of non-drinkers in the UK rose to 20%. This proves to be a prominent success achieved by the UK government in mitigating alcohol consumption.

As opined by Wong *et al.* (2018), health conditions have improved prominently over the years in the UK. On the contrary, as opined by Costa *et al.* (2020), the Covid-19 pandemic has witnessed the enhancement of alcohol consumption immensely and deaths due to comorbidity in the UK. In this context, the success rate of the UK government has been hampered extensively. It is observed that government policies have been well implemented in the UK. Under the "alcohol strategy" executed by the government, "alcohol-free" and "low-alcohol" products were extensively promoted in the UK (gov.uk, 2012). In this aspect, it is essential to note that the inclination of heavy drinkers towards alcohol consumption has reduced over time.On the other hand, as per the view of Almila (2021), young adults in the UK extensively relish alcoholic beverages with low alcohol content at current times. This, in turn, depicts that the steps and policies adopted in the UK are effective to some extent. The contradictory reports of enhanced alcohol consumption during the pandemic reflect an alarming concern. In this aspect, it is essential to note that between 2020 and 2021, the UK witnessed a "58.6%" increase in the higher risk levels of "heavy drinkers" (gov.uk, 2021). Thus, the success of the UK’s strategies and steps to mitigate alcohol consumption has been challenged during the recent global pandemic.

Conceptual framework

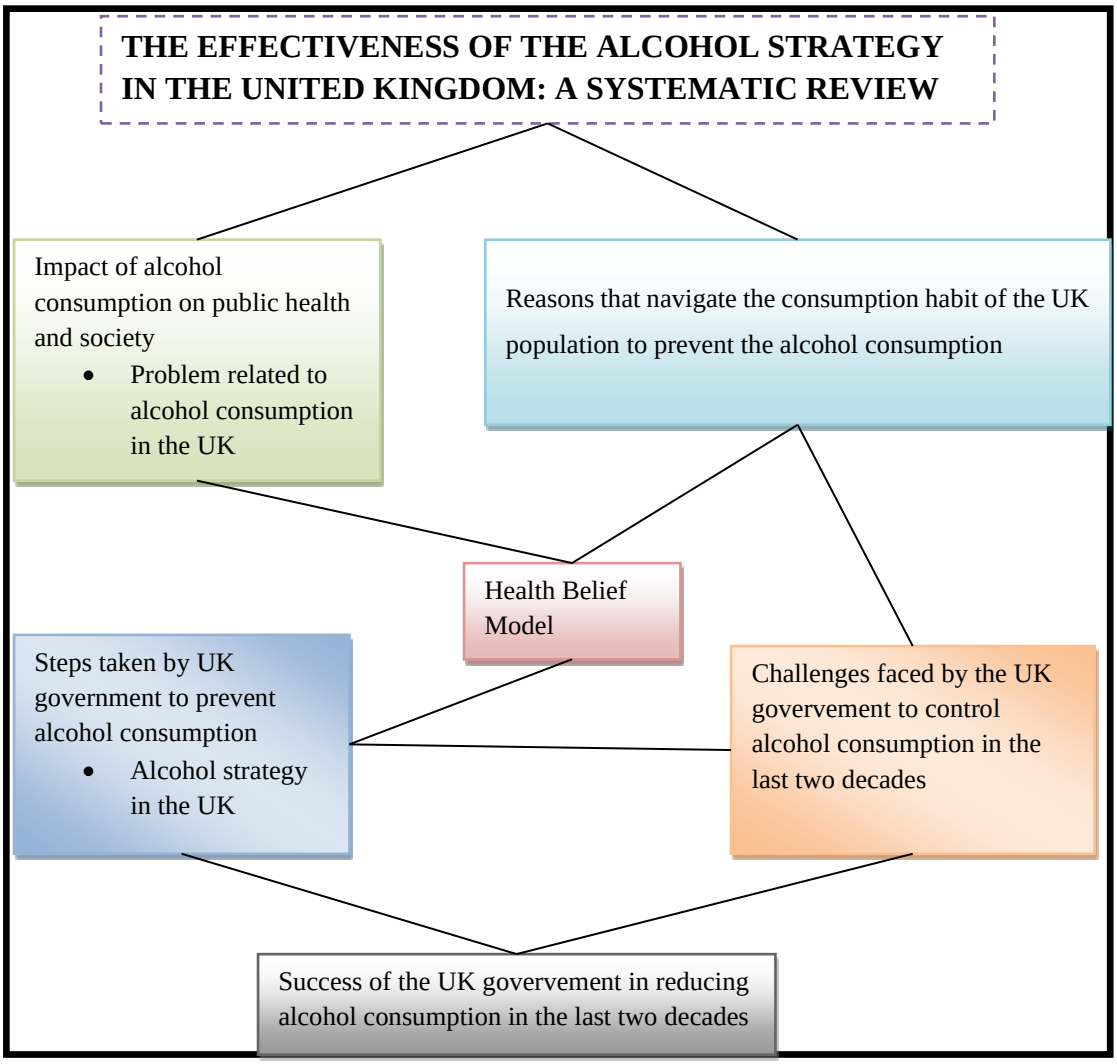


Figure 2.5: Conceptual framework

(Source: Created by author)

The above figure 2.5 determines the conceptual framework of this chapter for reviewing valuable information from the literature. In this aspect, it is essential to note that the impacxt of alcohol consumption on public health and society and reasons for perventing the rate of alcohol consumption behaviour among the UK population has allowed the literature review to shed light on the impliaction of "Health Belief Model". Furthermore, this particular model helps in understanding the strategies untdertaken by the UK government to prevent alcohol consumption. This, in turn, helps in depicting the challenges experienced by the UK government to control the rate of alcohol consumption. Thus, on evalutaing the strategies and challenges, the success of the UK government have been interpreted in this chapter.

Literature gap

The literature has been able to provide valuable information regarding reasons behind the habit of Britishers consuming alcohol. It has been further identified that the steps undertaken by the UK government were relevant in addressing the issue of enhanced alcohol consumption. In this scenario, it is observed that the literature has provided information about the steps and challenges faced by the UK government over the last few decades. However, the success rate of the UK

government in reducing alcohol consumption over the last twenty years has been less focused on the sources of literature. Therefore, the identified gap in the literature makes it essential to conduct the research further.

Research design

This study has prioritised the **"descriptive research design"**. .

Search strategy

The search strategy of this study includes **"keywords"** and **"boolean"** based searching. The keywords in this study search strategies include the "alcohol strategy of the UK". Furthermore, the keywords regarding "effectiveness of alcohol strategy of the UK in past 20 years" for data search involve the "influencing factors of alcohol consumption", "mitigating strategies", "reduced alcohol consumption", "20 years", and others. On the other hand, the three boolean operators include the AND, OR, and NOT (Liu *et al.* 2020). The data search strategy of this study involves the "alcohol strategy of the UK" AND "its effectiveness in the past 20 years". It has broadened the data findings of the keywords.

The NOT logic is effective in extracting the data regarding the effectiveness of the alcohol strategy of the UK" NOT any other places. It is helpful to narrow down the database per the study's specific requirements. The OR logic in the search strategy involves gathering data on a certain topic by different keywords. For instance, the data regarding the "alcohol strategy of the UK" is searched by using different keywords like "the mitigation strategies for alcohol consumption by the UK government" OR "Necessary steps taken by the UK government to reduce alcohol consumption".

Population (P)	Intervention (I)	Control (C)	Outcome (O)
UK population	Alcohol strategy	Reduction in alcohol consumption	Effectiveness of the intervention

Table 3.1: PICO framework

(Source: Self-created)

Table 3.3 illustrates that the study has focused on the UK population to evaluate the effects of alcohol strategy which intervened alcohol consumers in order to reduce alcohol consumption by controling through norms and restrictions. The outcome has helped to understand the effectiveness of the intervention in acheiving the purpose of reducing alcohol consumption among the UK population.

Data extraction

Data extraction includes the collection of necessary data from vast sources of data. In this study, several **"secondary data"** was extracted from the vast data sources. There are mainly two criteria involved in the data extraction process; one is the inclusion criteria, and the other one is the exclusion criteria. The inclusion criteria for the database of this study include the article and journals that are published **"in and after 2015"**. Hence, the exclusion criteria of the study include the exclusion of articles and journals that are published "**before 2015"**.

The methodology of this study included the UK government reports regarding alcohol consumption reduction; those were published between the years **2003 to 2023** as this study aims to find out the effectiveness of the alcohol strategy of the UK in the past 20 years. Thus, the UK government reports prior to 2003 got rejected. The data extraction for this study includes only the articles and journals that are published in **"English"**. Articles in a language other than English are excluded. The required data for this study include only the articles that are **"full text available"**, so the articles with "partially available text" are not considered. The inclusion criteria of this study involve the articles that are ***accessible in "pdf format"***. The pdf format articles which are inaccessible are excluded from the data source of this study.

Publishers are entitled to publish articles, books and journals that contain accurate data and are independent of copyright; while inaccurate information and data are restricted or banned after publishing, making them unavailable (Patel and Patel, 2019). Thus, the available secondary sources considered in the study are likely to be reliable. It is essential to incorporate reliable sources in research to ensure accuracy and meet the research purpose. As a result, authentic sources have been prioritised for data collection. Search engines like google scholar have been considered for data collection as it contains multiple databases. The UK government reports which are reliable and authentic have been considered. In addition, government authorities and publishers need to validate data and information prior to publishing (Phillips and Ritala, 2019). Including such secondary sources in the data collection process has helped to ensure the validity of data in the study.

Secondary sources that provided adequate information regarding the alcohol strategy, its effectiveness in reducing alcohol consumption among the UK population have been included. Secondary sources that lacked any of the inclusion criteria have been excluded for data extraction purpose.

Data synthesis

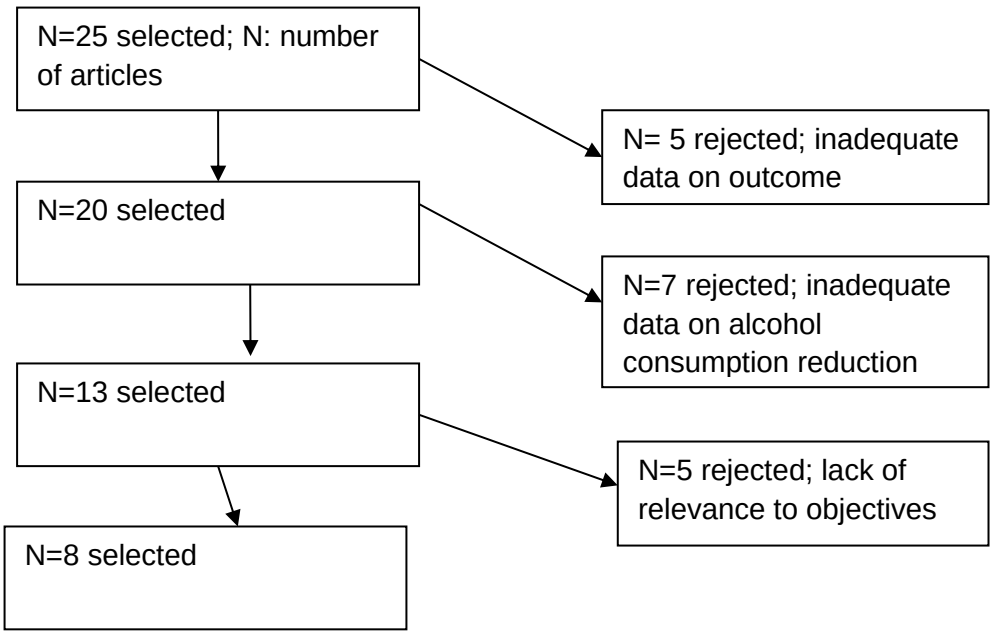


Figure 3.1: PRISMA
(Source: Self-created)

The data synthesis process for this study includes taking several secondary data and then organising such data as per their characteristics according to the requirement of the study. There are two types of data one is quantitative, and the other one is qualitative. In this study, a vast number of **"qualitative data"** are synthesised as per their significance with the objectives and aims of the study and considering its competencies to answer the research questions. Prisma stands for "Preferred Reporting Items for Systematic Reviews and Meta-Analyses". According to (figure 3.2), a total of 25 articles were taken, and five articles among them got rejected due to a lack of data on such articles. For the remaining 20 articles, it is noted that there were seven such articles that were unable to provide adequate data regarding "alcohol consumption reduction". Furthermore, within the 13 articles, 5 article got excluded due to there was lack of significance of those articles with the objectives of the study. Finally, 8 articles were selected that were found relevant to the purpose of the study.

As per the views of Snyder (2019), the data analysis is significant since it tends to exhibit appropriate and reliable data. The study has advocated the inclusion of the "**systematic review technique**" that has helped to summarise the essential characteristics of a large data set. This analysis technique ensures that the study can recognise the patterns and habits among the UK population regarding alcohol consumption. With the assistance of this data analysis technique, the study can examine and represent repeated patterns.

"Data analysis" is crucial to interpret the extracted data and deriving conclusive results (Phillips and Ritala, 2019). It is categorised into "qualitative and quantitative data analysis". A "qualitative data analysis" helps to analyse "textual or non-numeric" data collected in the research process (Patel and Patel, 2019). In contrast, a "quantitative data analysis" emphasises analysing "numeric data" based on statistical tests, numerical calculations and graphical representations (Mishra and Alok, 2022). Secondary data, which assumes statistical tests in the research process, are analysed using "quantitative data analysis".

The study has undertaken a "**systematic data analysis**" to analyse the secondary data extracted in the preceding research stages. The "quantitative data analysis" methods have been excluded from the study as statistical tests, numerical calculations, and graphical representation analysis of secondary data have not been considered. The "qualitative data analysis" method considered in the study has helped to analyse "textual or non-numeric data" collected in the research process. It has further helped to interpret the analysis and derive conclusive results from answering the research question and meeting the aim and objectives of the study.

"Systematic review" helps to analyse the views of scholar to interpret and conclude results (Mishra and Alok, 2022). The PICO method has been prioritised in the process. Aligning the reviews to the research objectives has been essential to achieving the research aim and answering the research question.

8 articles have been reviewed to understand the views of scholars in relation to effectiveness of alcohol strategy in the UK. The descriptions helped to understand the outcomes or effectiveness of alcohol strategy intervention to control alcohol consumption among the UK population. It has helped to interpret results that could be concluded to evaluate the concerned strategy's effectiveness.

Methodologies	Considerations
Data collection method	Secondary data collection method
Data analysis methods	Systematic analysis technique

Table 3.2: **Methodological Considerations**
(Source: Self-created)

Table 3.4 illustrates that peer-reviewed journals and articles relevant to the research subject have been prioritsied in the study to conduct a systematic review. The systematic review has further helped to answer the research questions, achieve the aim and objectives.

3.6 Research Ethics

"Research ethics" are the principles that guide the research process through appropriate paths (Mishra and Alok, 2022). It focuses on avoiding malpractices in the research process while drawing conclusions. It includes "honesty, integrity, respect for others, avoiding harm to others and data manipulations" (Patel and Patel, 2019). The study has abided by the ethical guidelines and adhered to the ethics of "honesty and integrity". The research process has avoided divergence from "research ethics" even in the absence of supervision, thereby maintaining integrity.

Data collected and presented have ensured utmost honesty by avoiding manipulation of views, data and information. It has been presented in the "true form" as interpreted without forcibly meeting the research aim. Further, data security and protection have been prioritised by storing data in"password-protected" files on technological devices. The passwords have not been revealed to external parties for privacy purposes. As a result, the accessibility of data to external parties has been denied while conducting the study. The data storage complied with the "Data Protection Act 2018" in storing and managing collected data. However, "confidentiality" of data and "anonymity" of participants are mandated for "primary methods of data collection"; hence have not been exercised in the concerned study. Voluntary participation and consent are further parts of the aforesaid method; hence has been excluded from consideration.

Secondary articles with copyright have not been used to avoid breach of regulations. No individuals or animals have been harmed in the research process. Further, all data have been presented with due respect to scholars and authors associated with the collected articles and journals. Intellectual property and materialistic property have not been harmed during the research process. It indicates that all necessary principles and guidelines pertaining to "research ethics" have been adhered to while conducting the study. Deviations from university regulations have been further avoided for ethical practices.

Research Limitations

The study has effectively achieved its aim and objectives while answering the research question. However, it has been subject to certain methodological limitations; the non-existence of such limitations could have strengthened the study further. The study has been effective in meeting the purpose by adopting the "secondary data collection method" and "qualitative analysis". However, the "primary data collection method" undertaken in the research process could have provided a wider scope to collect real-time data from government officials. For instance, barring the published government reports, the UK government is proactively engaged in assessing the effects of the alcohol strategy in reducing alcohol consumption in the UK; census surveys are continuous initiatives

by government bodies that reveal real-time data. The “primary data collection method” would have helped to acquire such accurate data providing new dimensions to the study through a dynamic approach. The inclusion of the "secondary data collection methods" limited the study to the views and opinions of scholars; recent data that are not published in the articles have been limited in the study.

In addition, consideration of language specification has been a limitation of the study. English as the specific language limited the scope of the study by restricting the inclusion of data published in other regional languages. The inclusion of articles, books and journals published in languages other than English, in addition to the existing secondary sources considered, could have provided a vast data set to conduct the study.

Consideration of secondary sources accessible in "pdf formats" has further created limitations for the study. The inclusion of secondary sources available in formats “other than pdf” could have provided additional data. Additional data could have further strengthened the study with enriched multi-dimensional views. Despite the methodological limitations, the study has effectively concluded by meeting the purpose and evaluating the “effectiveness of the UK alcohol strategy in reducing alcohol consumption among the UK population over the past 20 years”.

References and bibliography

1. Alcoholchange.org.uk 2023 *Alcohol statistics* (no date) *Alcohol Change UK*. Available at: https://alcoholchange.org.uk/alcohol-facts/fact-sheets/alcohol-statistics (Accessed: January 28, 2023).
2. Almila, A.M., 2021. A Wine Flight of Gendered Sociology: Vignettes of (Apparent) Trivialities. *Journal of Cultural Analysis and Social Change*.
3. Assets.publishing.service.gov.uk 2023. *The government’s alcohol strategy* (no date). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/224075/alcohol-strategy.pdf (Accessed: January 28, 2023).
4. Connolly, K., Bhattacharya, A., Lisenkova, K. and McGregor, P.G., 2019. Can a policy-induced reduction in alcohol consumption improve health outcomes and stimulate the UK economy?: a potential ‘double dividend’. *Drug and alcohol review*, *38*(5), pp.554-560.
5. Costa, F.F., Rosário, W.R., Farias, A.C.R., de Souza, R.G., Gondim, R.S.D. and Barroso, W.A., 2020. Metabolic syndrome and COVID-19: An update on the associated comorbidities and proposed therapies. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, *14*(5), pp.809-814.
6. Daragmeh, A., Sági, J. and Zéman, Z., 2021. Continuous intention to use e-wallet in the context of the covid-19 pandemic: Integrating the health belief model (hbm) and technology continuous theory (TCT). *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(2), p.132.
7. Di Santo, S.G., Franchini, F., Filiputti, B., Martone, A. and Sannino, S., 2020. The effects of COVID-19 and quarantine measures on the lifestyles and mental health of people over 60 at increased risk of dementia. *Frontiers in psychiatry*, *11*, p.578628.
8. Drinkaware.co.uk 2020 *Alcohol consumption UK* (no date) *Drinkaware*. Available at: https://www.drinkaware.co.uk/research/alcohol-facts-and-data/alcohol-consumption-uk#:~:text=In%202020%2F21%2C%2058%25,compared%20to%2015%25%20of%20women. (Accessed: January 28, 2023).
9. Gov.uk (2012) *Alcohol strategy*, *GOV.UK*. GOV.UK. Available at: https://www.gov.uk/government/publications/alcohol-

strategy#:~:text=The%20alcohol%20strategy%20sets%20out,minimum%20unit%20price%20for%20alcohol (Accessed: February 8, 2023).

10. Gov.uk (2023) *2010 to 2015 government policy: Harmful drinking* (no date). Available at: https://www.gov.uk/government/publications/2010-to-2015-government-policy-harmful-drinking/2010-to-2015-government-policy-harmful-drinking#:~:text=UK%20policies%20list.-,Issue,most%20days%20or%20every%20day. (Accessed: January 28, 2023).
11. gov.uk, 2012. *Alcohol strategy*, *GOV.UK*. GOV.UK. Available at: https://www.gov.uk/government/publications/alcohol-strategy#:~:text=The%20alcohol%20strategy%20sets%20out,minimum%20unit%20price%20for%20alcohol (Accessed: February 8, 2023).
12. gov.uk, 2017. *"2010 to 2015 government policy": Harmful drinkingGOV.UK*. Available at: https://www.gov.uk/government/publications/2010-to-2015-government-policy-harmful-drinking/2010-to-2015-government-policy-harmful-drinking (Accessed: February 8, 2023).
13. gov.uk, 2021. *Monitoring alcohol consumption and harm during the Covid-19 pandemic.* Available at: https://www.gov.uk/government/publications/alcohol-consumption-and-harm-during-the-covid-19-pandemic/monitoring-alcohol-consumption-and-harm-during-the-covid-19-pandemic-summary#:~:text=These%20surveys%20suggest%20that%20respondents,risk%20and%20higher%20risk%20levels (Accessed: February 8, 2023).
14. Hafidz, M.A. and Elihami, E., 2021. Learning The Nonformal Education Through Research Methodology: A Literature Review. *Jurnal Edukasi Nonformal*, *2*(1), pp.47-55.
15. Haghpanahan, H., Lewsey, J., Mackay, D.F., McIntosh, E., Pell, J., Jones, A., Fitzgerald, N. and Robinson, M., 2019. An evaluation of the effects of lowering blood alcohol concentration limits for drivers on the rates of road traffic accidents and alcohol consumption: a natural experiment. *The Lancet*, *393*(10169), pp.321-329.
16. Jacob, L., Smith, L., Armstrong, N.C., Yakkundi, A., Barnett, Y., Butler, L., McDermott, D.T., Koyanagi, A., Shin, J.I., Meyer, J. and Firth, J., 2021. Alcohol use and mental health during COVID-19 lockdown: A cross-sectional study in a sample of UK adults. *Drug and alcohol dependence*, *219*, p.108488.
17. Jacob, L., Smith, L., Armstrong, N.C., Yakkundi, A., Barnett, Y., Butler, L., McDermott, D.T., Koyanagi, A., Shin, J.I., Meyer, J. and Firth, J., 2021. Alcohol use and mental health during COVID-19 lockdown: A cross-sectional study in a sample of UK adults. *Drug and alcohol dependence*, *219*, p.108488.
18. Kilian, C., Rehm, J., Allebeck, P., Braddick, F., Gual, A., Barták, M., Bloomfield, K., Gil, A., Neufeld, M., O'Donnell, A. and Petruželka, B., 2021. Alcohol consumption during the COVID-19 pandemic in Europe: a large-scale cross-sectional study in 21 countries. *Addiction*, *116*(12), pp.3369-3380.
19. Lees, B., Meredith, L.R., Kirkland, A.E., Bryant, B.E. and Squeglia, L.M., 2020. Effect of alcohol use on the adolescent brain and behaviour. *Pharmacology Biochemistry and Behavior*, *192*, p.172906.
20. Li, J., Lovatt, M., Eadie, D., Dobbie, F., Meier, P., Holmes, J., ... & MacKintosh, A. M. (2017). Public attitudes towards alcohol control policies in Scotland and England: Results from a mixed-methods study. *Social Science & Medicine*, *177*, 177-189.
21. Lim, A.W., Van Schalkwyk, M.C., Maani Hessari, N. and Petticrew, M.P., 2019. Pregnancy, fertility, breastfeeding, and alcohol consumption: an analysis of framing and completeness of

information disseminated by alcohol industry-funded organizations. *Journal of studies on alcohol and drugs*, *80*(5), pp.524-533.

22. Mishra, S.B. and Alok, S., 2022. Handbook of research methodology.
23. Morris, H., Larsen, J., Catterall, E., Moss, A.C. and Dombrowski, S.U., 2020. Peer pressure and alcohol consumption in adults living in the UK: a systematic qualitative review. *BMC Public Health*, *20*, pp.1-13.
24. Nhs.uk 2023 *NHS choices*. NHS. Available at: https://www.nhs.uk/conditions/alcohol-misuse/risks/ (Accessed: January 28, 2023).
25. Nicholls, E., 2020. 'I feel like I have to become part of that identity': Negotiating femininities and friendships through alcohol consumption in Newcastle, UK. *International Journal of Drug Policy*, *81*, p.102524.
26. Oldham, M., Garnett, C., Brown, J., Kale, D., Shahab, L. and Herbec, A., 2021. Characterising the patterns of and factors associated with increased alcohol consumption since COVID-19 in a UK sample. *Drug and alcohol review*, *40*(6), pp.890-899.
27. Pandey, P. and Pandey, M.M., 2021. *Research methodology tools and techniques*. Bridge Center.
28. Parliament.uk, 2021. *Commission on alcohol harm: 'it's everywhere'—alcohol's public face and ...* (no date). Available at: https://lordslibrary.parliament.uk/commission-on-alcohol-harm-its-everywhere-alcohols-public-face-and-private-harm/ (Accessed: February 8, 2023).
29. Patel, M. and Patel, N., 2019. Exploring Research Methodology. *International Journal of Research and Review*, *6*(3), pp.48-55.
30. Phillips, M.A. and Ritala, P., 2019. A complex adaptive systems agenda for ecosystem research methodology. *Technological Forecasting and Social Change*, *148*, p.119739.
31. Rafsanjani, M.A., Fitrayati, D., Andriansyah, E.H., Ghofur, M.A. and Prakoso, A.F., 2022. Development of Research Methodology Textbook Based-On Contextual Teaching and Learning. *International Journal of Multicultural and Multireligious Understanding*, *8*(12), pp.618-626.
32. Roerecke, M., Kaczorowski, J., Tobe, S.W., Gmel, G., Hasan, O.S. and Rehm, J., 2017. The effect of a reduction in alcohol consumption on blood pressure: a systematic review and meta-analysis. *The Lancet Public Health*, *2*(2), pp.e108-e120.
33. Ruralhealthinfo.org, 2019. *The health belief model - rural health promotion and disease prevention toolkit* (no date) *The Health Belief Model - Rural Health Promotion and Disease Prevention Toolkit*. Available at: https://www.ruralhealthinfo.org/toolkits/health-promotion/2/theories-and-models/health-belief#:~:text=The%20Health%20Belief%20Model%20is,models%20for%20understanding%20health%20behaviors (Accessed: February 8, 2023).
34. Service.gov.uk, 2017. *The government's alcohol strategy* (no date). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/224075/alcohol-strategy.pdf (Accessed: February 8, 2023).
35. Simpson, R.F., Hermon, C., Liu, B., Green, J., Reeves, G.K., Beral, V. and Floud, S., 2019. Alcohol drinking patterns and liver cirrhosis risk: analysis of the prospective UK Million Women Study. *The Lancet Public Health*, *4*(1), pp.e41-e48.
36. Singh, R., Goyal, E., Chaudhury, S., Puria, A., Kumar, S. and Kumar, A., 2022. Psychiatric morbidity in family members of alcohol dependence patients. *Industrial Psychiatry Journal*, *31*(2), p.306.
37. Snyder, H., 2019. Literature review as a research methodology: An overview and guidelines. *Journal of business research*, *104*, pp.333-339.

38. Statista.com 2022 *Alcoholic beverage per capita volume UK 2012-2025*, *Statista*. Available at: https://www.statista.com/forecasts/755595/alcohol-consumption-in-liters-per-head-in-the-united-kingdom#:~:text=This%20statistic%20displays%20the%20amount,to%2082%20liters%20per%20capita. (Accessed: January 28, 2023).
39. Statista.com 2022 *Expenditure on alcoholic drinks 2005-2021*, *Statista*. Available at: https://www.statista.com/statistics/281935/spending-on-alcoholic-drinks-in-the-united-kingdom-uk-since-2005/ (Accessed: January 28, 2023).
40. Statista.com 2023 *Alcoholic drinks - UK: Statista market forecast* (no date) *Statista*. Available at: https://www.statista.com/outlook/cmo/alcoholic-drinks/united-kingdom (Accessed: January 28, 2023).
41. Stewart, C. 2022 *Alcohol-specific deaths in the UK 1994-2020*, *Statista*. Available at: https://www.statista.com/statistics/288964/alcohol-related-deaths-united-kingdom-uk-by-sex/ (Accessed: January 28, 2023).
42. Subramaniyan, V., Chakravarthi, S., Jegasothy, R., Seng, W.Y., Fuloria, N.K., Fuloria, S., Hazarika, I. and Das, A., 2021. Alcohol-associated liver disease: A review on its pathophysiology, diagnosis and drug therapy. *Toxicology Reports*, *8*, pp.376-385.
43. unizin.org, 2018. *The health belief model*, *Methods for Stress Management*. Available at: https://psu.pb.unizin.org/kines082/chapter/the-health-belief-model/ (Accessed: February 8, 2023).
44. Weerasinghe, A., Schoueri-Mychasiw, N., Vallance, K., Stockwell, T., Hammond, D., McGavock, J., Greenfield, T.K., Paradis, C. and Hobin, E., 2020. Improving knowledge that alcohol can cause cancer is associated with consumer support for alcohol policies: Findings from a real-world alcohol labelling study. *International Journal of Environmental Research and Public Health*, *17*(2), p.398.
45. Who.int 2023.*AlcoholWorld Health Organization*. World Health Organization. Available at: https://www.who.int/health-topics/alcohol#tab=tab_1 (Accessed: January 28, 2023).
46. Williams, R., Aithal, G., Alexander, G.J., Allison, M., Armstrong, I., Aspinall, R., Baker, A., Batterham, R., Brown, K., Burton, R. and Cramp, M.E., 2020. Unacceptable failures: the final report of the Lancet Commission into liver disease in the UK. *The Lancet*, *395*(10219), pp.226-239.
47. Wong, D.J.N., Harris, S.K., Moonesinghe, S.R., Moonesinghe, S.R., Wong, D.J., Harris, S.K., Bedford, J., Boney, O., Chazapis, M., Drake, S. and Farmer, L., 2018. Cancelled operations: a 7-day cohort study of planned adult inpatient surgery in 245 UK National Health Service hospitals. *British journal of anaesthesia*, *121*(4), pp.730-738.
48. Wong, L.P., Alias, H., Wong, P.F., Lee, H.Y. and AbuBakar, S., 2020. The use of the health belief model to assess predictors of intent to receive the COVID-19 vaccine and willingness to pay. *Human vaccines & immunotherapeutics*, *16*(9), pp.2204-2214.